

**TRANSNET LIMITED**  
(REGISTRATION NO.1990/000900/06)  
**TRADING AS TRANSNET freight rail**

**MINIMUM COMMUNAL HEALTH REQUIREMENTS IN AREAS OUTSIDE THE JURISDICTION OF A LOCAL AUTHORITY: TEMPORARY FACILITIES FOR CONTRACTOR'S PERSONNEL**

**1. CAMPS**

- 1.1 Prior to the erection of any camp, the Contractor shall submit to the Technical Officer, for his approval, details of his proposals as to the site, water supply, sanitation, and size and type of buildings. Where the site is on private land, the Contractor shall submit the written approval for the use of the site of the relevant statutory authority and of the owner and occupier of the land (as applicable).
- 1.2 Camps must not be erected on land infested with field rodents.
- 1.3 Adequate drainage shall be provided to carry off storm and waste water.
- 1.4 Buildings shall be built to a neat and orderly pattern.
- 1.5 All buildings shall have smooth, hard, impervious floors, graded to provide effective drainage and to permit washing.
- 1.6 Camps shall be maintained by the Contractor at his own expense in a clean and tidy condition. The Contractor shall take such steps as the Technical Officer and landowner/occupier may demand to prevent the creation of a nuisance.
- 1.7 When so instructed by the Technical Officer, the Contractor shall, at his own expense, erect suitable screens between the camp and any public road, thoroughfare or railway line.
- 1.8 After removal of a camp, the Contractor shall, at his own expense, restore the site to its original condition to the satisfaction of the Technical Officer and of the landowner and occupier where the site is on private land.

**2. HOUSING**

- 2.1 Every living room shall have cross ventilation, both constant and occasional. Where only one window is provided, it shall not be in the same wall as the door.
- 2.2 Dimensions of living rooms shall be sufficient to allow 3.5 square metres of floor area and 11 cubic metres of air space for each person over the age of 10 years. The floor area of any living room shall not be less than 7,8 square metres.

- 2.3 Flat-roofed quarters shall have a minimum roof height of 3 metres above floor level. For quarters with pitched roofs, the wall height shall be not less than 2,6 metres above the floor with a minimum height above floor of 3 metres at the top of the pitch.
- 2.4 Doors shall not be less than 2m x 0,75m and must be halved.
- 2.5 Windows of each living room shall have an area not less than one twelfth of the floor area and shall be capable of opening to at least half their full area.
- 2.6 In areas where malaria is prevalent, doors and windows must be fitted with gauze screens.
- 2.7 Cooking shelters shall comprise roofed structures, three sides of which shall be enclosed by a weatherproof material, approved by the Technical Officer to a height of at least **1m** above ground level.
- 2.7.1 Sleeping quarters shall not accommodate more than 8 persons per room.
- 2.7.2 Pegboards shall be carried on metal or concrete supports and shall be separated by partitions not less than 0,4 metres high extending to within 150mm of the end of the bunk. Pegboards shall be removable for cleaning.

### 3. **WATER SUPPLY AND ABLUTION FACILITIES**

- 3.1 The Contractor shall ensure that an adequate and conveniently situated supply of potable water is provided.
- 3.2 Separate buildings for ablution facilities shall be provided. Where approval has been obtained for the housing of both males and females, separate facilities for each sex shall be provided. The proportion shall be 1 cubicle for 20 persons.
- 3.3 Waste water shall be hygienically disposed of.

### 4. **SANITATION**

- 4.1 Separate buildings for latrine facilities shall be provided. Where housing are provided for both males and females, separate facilities for each sex shall be provided. The proportions shall be at least one squatting seat for every 15 persons or less in the case of pit latrines, or one for every 10 persons or less in case of pail latrines.

Latrines shall be fly proof and sited at least 10 metres from any other building, and shall not face on any public road, thoroughfare, railway line or residential property. Pits shall not be less than 2,5 metres deep and sited not less than 120 metres from nearest underground water source.

- 4.2 Latrines shall be so constructed, situated and maintained, and night soil so disposed of as to prevent access by animals, breeding of flies, pollution of streams and domestic water supplies, and other nuisances. Where a night soil removal service is operated by

a competent authority, use of such service shall be obligatory, and the use of pit latrines and atria pits will not be permitted.

- 4.3 At least one refuse bin of adequate size with close fitting lid shall be provided for each building. Refuse bins shall be emptied and cleaned out daily.
- 4.4 Labour shall be employed on camp sanitation duties on the following basis:-
- 4.4.1 Where the number of persons living at the camp is 20 or less - one unit.
- 4.4.2 For additional numbers over 20 living at the camp - one unit per 100 or part thereof.
- 4.5 Unless refuse is removed by a competent authority, it shall be disposed of in pits and covered over daily with a layer of earth or ash of sufficient thickness to prevent depredations by rodents and the breeding of flies.
- 4.6 Adequate measures shall be taken against all vermin and insects responsible for the spread of disease. Any instructions of a competent health authority shall be carried out promptly and implicitly.
- 4.7 Buildings and bedboards shall be treated whenever necessary with an approved insecticide.
- 4.8 The Contractor shall permit and facilitate inspection of the camp and structures on the site by the staff of Transnet or any other competent authority, and shall comply with any reasonable request by such staff or any other competent authority to eliminate any unsanitary condition.
- 4.9 Any outbreak of infectious disease shall immediately be reported telephonically and confirmed in writing to the Technical Officer.
- 4.10 The keeping of animals of any sort is not permitted.
- 4.11 The Contractor shall have on hand at the camp the necessary tools, disinfectants and cleaning materials to maintain and clean the sanitary facilities.

## 5. **RATIONS**

Rations, where supplied by the Contractor, shall be stored in a suitable and rodent proof building with sufficient shelving.

**P02b-06 (JLH)**

**TRANSNET LIMITED**

(Registration no. 1990/000900//06)

**SAFETY ARRANGEMENTS AND PROCEDURAL COMPLIANCE  
WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT  
(ACT 85 OF 1993) AND APPLICABLE REGULATIONS****1. General**

- 1.1 The Contractor and Transnet Limited (hereinafter referred to as "Transnet") are individual employers, each in its own right, with their respective duties and obligations set out in the Occupational Health and Safety Act, Act 85 of 1993 (the Act) and applicable Regulations.
- 1.2 The Contractor accepts, in terms of the General Conditions of Contract and in terms of the Act, his obligations as an employer in respect of all persons in his employ, other persons on the premises or the Site or place of work or on the work to be executed by him, and under his control. He shall, before commencement with the execution of the contract work, comply with the provisions set out in the Act, and shall implement and maintain a Health and Safety Plan as described in the Construction Regulations, 2003 and as approved by Transnet, on the Site and place of work for the duration of the Contract.
- 1.3 The Contractor accepts his obligation to complying fully with the Act and applicable Regulations notwithstanding the omission of some of the provisions of the Act and the Regulations from this document.
- 1.4 Transnet accepts, in terms of the Act, its obligations as an employer of its own employees working on or associated with the site or place of work, and the Contractor and Project Manager or his deputy shall at all times, co-operate in respect of the health and safety management of the site, and shall agree on the practical arrangements and procedures to be implemented and maintained during execution of the Works.
- 1.5 In the event of any discrepancies between any legislation and this specification, the applicable legislation will take precedence.

**2. Definitions**

- 2.1 In this Specification any word or expression to which a meaning has been assigned in the Construction Regulations, shall have the meaning so assigned to it, unless the context otherwise indicates: -
- 2.2 The work included in this Contract shall for the purposes of compliance with the Act be deemed to be "**Construction Work**", which, in terms of the Construction Regulations, 2003 means any work in connection with: -
- (a) the erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;

- (b) the installation, erection, dismantling or maintenance of fixed plant where such work includes the risk of a person falling;
  - (c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
  - (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;
- 2.3 **“competent person”** in relation to construction work, means any person having the knowledge, training and experience specific to the work or task being performed: Provided that where appropriate qualifications and training are registered as per the South African Qualifications Authority Act, 1995 these qualifications and training shall be deemed to be the required qualifications and training;
- 2.4 **“contractor”** means principal contractor and **“subcontractor”** means contractor as defined by the Construction Regulations, 2003.
- 2.5 **“fall protection plan”** means a documented plan, of all risks relating to working from an elevated position, considering the nature of work undertaken, and setting out the procedures and methods applied to eliminate the risk;
- 2.6 **“health and safety file”** means a file, or other record in permanent form, containing the information required to be kept on site in accordance with the Act and applicable Regulations;
- 2.7 **“Health and Safety Plan ”** means a documented plan which addresses the hazards identified and include safe work procedures to mitigate, reduce or control the hazards identified;
- 2.8 **“Risk Assessment”** means a programme to determine any risk associated with any hazard at a construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard;
- 2.9 **“the Act”** means the Occupational Health and Safety Act No. 85 of 1993.

### 3. Procedural Compliance

- 3.1 The Contractor who intends to carry out any construction work shall, before carrying out such work, notify the Provincial Director in writing if the construction work:-
- (a) includes the demolition of a structure exceeding a height of 3 metres; or
  - (b) includes the use of explosives to perform construction work; or
  - (c) includes the dismantling of fixed plant at a height greater than 3m,
- and shall also notify the Provincial Director in writing when the construction work exceeds 30 days or will involve more than 300 person days of construction work and if the construction work:-
- (a) includes excavation work deeper than 1m; or

- (b) includes working at a height greater than 3 metres above ground or a landing.
- 3.2 The notification to the Provincial Director shall be on a form similar to Annexure A of the Construction Regulations, 2003, also shown in Annexure 1 of this Specification. The Contractor shall ensure that a copy of the completed notification form is kept on site for inspection by an inspector, Project Manager or employee.
- 3.3 The Contractor shall, in accordance with the Act and applicable Regulations, make all the necessary appointments of competent persons in writing on a form similar to Annexure 2 of this Specification and deliver copies thereof to the Project Manager. Copies should also be retained on the health and safety file.
- 3.4 Subcontractors shall also make the above written appointments and the Contractor shall deliver copies thereof to the Project Manager.
- 3.5 In the case of a self-employed Contractor or any subcontractor who has the appropriate competencies and supervises the work himself, the appointment of a construction supervisor in terms of regulation 6.1 of the Construction Regulations, 2003 will not be necessary. The Contractor shall in such a case execute and sign a declaration, as in Annexure 3, by which he personally undertakes the duties and obligations of the "Chief Executive Officer" in terms of section 16(1) of the Act.
- 3.6 The Contractor shall, before commencing any work, obtain from the Project Manager an access certificate as in Annexure 4 executed and signed by him, permitting and limiting access to the designated site or place of work by the Contractor and any subcontractors under his control.
- 3.7 Procedural compliance with Act and Regulations, as above, shall also apply to any subcontractors as employers in their own right. The Contractor shall furnish the Project Manager with full particulars of such subcontractors and shall ensure that they comply with the Act and Regulations and Transnet's safety requirements and procedures.

#### **4. Special Permits**

Where special permits are required before work may be carried out such as for hotwork, isolation permits, work permits and occupations, the Contractor shall apply to the Project Manager or the relevant authority for such permits to be issued. The Contractor shall strictly comply with the conditions and requirements pertaining to the issue of such permits.

#### **5. Health and Safety Programme**

- 5.1 The Tenderer shall, with his tender, submit a Health and Safety Programme setting out the practical arrangements and procedures to be implemented by him to ensure compliance by him with the Act and Regulations and particularly in respect of: -
- (i) The provision, as far as is reasonably practical, of a working environment that is safe and without risk to the health of his employees and subcontractors in terms of section 8 of the Act;

- (ii) the execution of the contract work in such a manner as to ensure in terms of section 9 of the Act that persons other than those in the Contractor's employment, who may be directly affected by the contract work are not thereby exposed to hazards to their health and safety;
  - (iii) ensuring, as far as is reasonably practical, in terms of section 37 of the Act that no employee or subcontractor of the Contractor does or omits to do any act which would be an offence for the Contractor to do or omit to do.
- 5.2 The Contractor's Health and Safety Programme shall be based on a risk assessment in respect of the hazards to health and safety of his employees and other persons under his control that are associated with or directly affected by the Contractor's activities in performing the contract work and shall establish precautionary measures as are reasonable and practical in protecting the safety and health of such employees and persons.
- 5.3 The Contractor shall cause a risk assessment contemplated in clause 5.2 above to be performed by a competent person, appointed in writing, before commencement of any Construction Work and reviewed during construction. The Risk Assessments shall form part of the Health and Safety programme to be applied on the site and shall include at least the following:
- (a) The identification of the risks and hazards that persons may be exposed to;
  - (b) the analysis and evaluation of the hazards identified;
  - (c) a documented Health and Safety Plan, including safe work procedures to mitigate, reduce or control the risks identified;
  - (d) a monitoring and review plan.
- 5.4 The Health and Safety Plan shall include full particulars in respect of: -
- (a) The safety management structure to be instituted on site or place of work and the names of the Contractor's health and safety representatives and members of safety committees where applicable;
  - (b) the safe working methods and procedures to be implemented to ensure the work is performed in compliance with the Act and Regulations;
  - (c) the safety equipment, devices and clothing to be made available by the Contractor to his employees;
  - (d) the site access control measures pertaining to health and safety to be implemented;
  - (e) the arrangements in respect of communication of health and safety related matters and incidents between the Contractor, his employees, subcontractors and the Project Manager with particular reference to the reporting of incidents in compliance with Section 24 and General Administrative Regulation 8 of the Act and with the pertinent clause of the General Conditions of Contract forming part of the Contract and
  - (f) the introduction of control measures for ensuring that the Safety Plan is

maintained and monitored for the duration of the Contract.

- 5.4 The Health and Safety programme shall be subject to the Project Manager's approval and he may, in consultation with the Contractor, order that additional and/or supplementary practical arrangements and procedures be implemented and maintained by the Contractor or that different working methods or safety equipment be used or safety clothes be issued which, in the Project Manager's opinion, are necessary to ensure full compliance by the Contractor with his obligations as an employer in terms of the Act and Regulations. The Project Manager or his deputy shall be allowed to attend meetings of the Contractor's safety committee as an observer.
- 5.5 The Contractor shall take reasonable steps to ensure that each subcontractor's Health and Safety Plan is implemented and maintained on the construction site: Provided that the steps taken, shall include periodic audits at intervals mutually agreed to between the them, but at least once every month.
- 5.6 The Contractor shall stop any subcontractor from executing any construction work, which is not in accordance with the Contractor's, and/or subcontractor's Health and Safety Plan for the site or which poses a threat to the health and safety of persons.
- 5.7 The Contractor shall ensure that a copy of the Health and Safety Plan is available on site for inspection by an inspector, Project Manager, agent, subcontractor, employee, registered employee organisation, health and safety representative or any member of the health and safety committee.
- 5.8 The Contractor shall consult with the health and safety committee or, if no health and safety committee exists, with a representative group of employees, on the development, monitoring and review of the Risk Assessment.
- 5.9 The Contractor shall ensure that all employees under his control are informed, instructed and trained by a competent person regarding any hazard and the related work procedures before any work commences, and thereafter at such times as may be determined in the Risk Assessment.
- 5.10 The Contractor shall ensure that all subcontractors are informed regarding any hazard as stipulated in the Risk Assessment before any work commences, and thereafter at such times as may be determined in the Risk Assessment.
- 5.11 The Contractor shall ensure that all visitors to a construction site undergoes health and safety induction pertaining to the hazards prevalent on the site and shall be provided with the necessary personal protective equipment.

## 6. Fall Protection Plan

- 6.1 In the event of the risk and hazard identification, as required in terms of clause 5.3 of this Specification, revealing risks relating to working from an elevated position the contractor shall cause the designation of a competent person, responsible for the preparation of a fall protection plan;

6.2 The Contractor shall implement, maintain and monitor the fall protection plan for the duration of Contract. The Contractor shall also take such steps to ensure the continued adherence to the fall protection plan.

6.3 The fall protection plan shall include:-

- (a) A Risk Assessment of all work carried out from an elevated position;
- (b) the procedures and methods to address all the identified risks per location;
- (c) the evaluation of the employees physical and psychological fitness necessary to work at elevated positions;
- (d) the training of employees working from elevated positions; and
- (e) the procedure addressing the inspection, testing and maintenance of all fall protection equipment.

## 7. Hazards and Potential Hazardous Situations

The Contractor and the Project Manager shall immediately notify one another of any hazardous or potentially hazardous situations which may arise during performance of the Contract by the Contractor or any subcontractor and, in particular, of such hazards as may be caused by the design, execution and/or location and any other aspect pertaining to the contract work.

## 8. Health and Safety File

- 8.1 The Contractor shall ensure that a health and safety file is opened and kept on site and shall include all documentation required as per the Act and applicable regulations, and made available to an inspector, the Project Manager, or subcontractor upon request.
- 8.2 The Contractor shall ensure that a copy of the both his Health and Safety Plan as well as any subcontractor's Health and Safety Plan is available on request to an employee, inspector, contractor or the Project Manager.
- 8.3 The Contractor shall hand over a consolidated health and safety file to the Project Manager upon completion of the Construction Work and shall in addition to documentation mentioned in the Act and applicable Regulations include a record of all drawings, designs, materials used and other similar information concerning the completed structure.

**ANNEXURE 1**

**OCCUPATIONAL HEALTH AND SAFETY ACT, 1993**

**Regulation 3(1) of the Construction Regulations**

**NOTIFICATION OF CONSTRUCTION WORK**

- 
- 
- 1(a) Name and postal address of principal contractor:  
\_\_\_\_\_
- (b) Name and tel. no of principal contractor's contact person:  
\_\_\_\_\_
2. Principal contractor's compensation registration number: \_\_\_\_\_
- 3.(a) Name and postal address of client:  
\_\_\_\_\_
- (b) Name and tel no of client's contact person or agent:  
\_\_\_\_\_
- 4.(a) Name and postal address of designer(s) for the project:  
\_\_\_\_\_
- (b) Name and tel. no of designer(s) contact person:  
\_\_\_\_\_
5. Name and telephone number of principal contractor's construction supervisor on site appointed in terms of regulation 6(1).  
\_\_\_\_\_
6. Name/s of principal contractor's construction sub-ordinate supervisors on site appointed in terms of regulation 6(2).  
\_\_\_\_\_
7. Exact physical address of the construction site or site office:  
\_\_\_\_\_
8. Nature of the construction work:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
9. Expected commencement date: \_\_\_\_\_
10. Expected completion date: \_\_\_\_\_

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11. Estimated maximum number of persons on the construction site: \_\_\_\_\_

12. Planned number of contractors on the construction site accountable to the principle contractor:

\_\_\_\_\_

13. Name(s) of contractors already chosen.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
**Principal Contractor**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Client**

\_\_\_\_\_  
**Date**

\* THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR **PRIOR TO COMMENCEMENT** OF WORK ON SITE.

\* **ALL PRINCIPAL CONTRACTORS** THAT QUALIFY TO NOTIFY MUST DO SO EVEN IF ANOTHER PRINCIPAL CONTRACTOR ON THE SAME SITE HAD DONE SO PRIOR TO THE COMMENCEMENT OF WORK.

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**ANNEXURE 2**

**(COMPANY LETTER HEAD)**

**OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 OF 1993) :**

**SECTION/REGULATION:** \_\_\_\_\_

**REQUIRED COMPETENCY:** \_\_\_\_\_

In terms of \_\_\_\_\_ I, \_\_\_\_\_

representing the Employer) do hereby appoint \_\_\_\_\_

As the Competent Person on the premises at \_\_\_\_\_

(physical address) to assist in compliance with the Act and the applicable Regulations.

Your designated area/s is/are as follows :-

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*Date :* \_\_\_\_\_

*Signature :-* \_\_\_\_\_

*Designation :-* \_\_\_\_\_

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**ACCEPTANCE OF DESIGNATION**

*I, \_\_\_\_\_ do hereby accept this Designation and acknowledge that I understand the requirements of this appointment.*

*Date :* \_\_\_\_\_

*Signature :-* \_\_\_\_\_

*Designation :-* \_\_\_\_\_

**ANNEXURE 3**

**(COMPANY LETTER HEAD)**

**OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 (ACT 85 OF 1993) :**

**DECLARATION**

In terms of the above Act I, \_\_\_\_\_ am personally assuming the duties and obligations as Chief Executive Officer, defined in Section 1 of the Act and in terms of Section 16(1), I will, as far as is reasonably practicable, ensure that the duties and obligations of the Employer as contemplated in the above Act are properly discharged.

*Signature :-* \_\_\_\_\_

*Date :* \_\_\_\_\_

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**ANNEXURE 4**

**(LETTER HEAD OF BUSINESS DIVISION OR UNIT OF TRANSNET LIMITED)**

**SITE ACCESS CERTIFICATE**

Access to : \_\_\_\_\_ (Area)  
 Name of Contractor/Builder :- \_\_\_\_\_  
 Contract/Order No.: \_\_\_\_\_

The contract works site/area described above are made available to you for the carrying out of associated works

In terms of your contract/order with  
 (company) \_\_\_\_\_

Kindly note that you are at all times responsible for the control and safety of the Works Site, and for persons under your control having access to the site.

As from the date hereof you will be responsible for compliance with the requirements of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) as amended, and all conditions of the Contract pertaining to the site of the works as defined and demarcated in the contract documents including the plans of the site or work areas forming part thereof.

Signed : \_\_\_\_\_ Date : \_\_\_\_\_  
*PROJECT MANAGER*

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**ACKNOWLEDGEMENT OF RECEIPT**

Name of Contractor/Builder :- \_\_\_\_\_ I,  
 \_\_\_\_\_ do hereby acknowledge and accept the duties  
 and obligations in respect of the Safety of the site/area of Work in terms of the Occupational Health and  
 Safety Act; Act 85 of 1993.

Name : \_\_\_\_\_ Designation : \_\_\_\_\_

Signature : \_\_\_\_\_ Date : \_\_\_\_\_



**TRANSNET LIMITED**  
(REGISTRATION NO.1990/000900/06)

E7/1 (July 1998)

SPECIFICATION FOR WORKS ON, OVER, UNDER OR ADJACENT TO RAILWAY LINES AND NEAR  
HIGH VOLTAGE EQUIPMENT

(This Specification shall be used in Transnet Contracts)

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## 1 DEFINITIONS

The following definitions shall apply:

Authorised Person. A person whether an employee of Transnet or not, who has been specially authorised to undertake specific duties in terms of Transnet Freight Rail's publication SAFETY INSTRUCTIONS: HIGH-VOLTAGE ELECTRICAL EQUIPMENT, and who holds a certificate or letter of authority to that effect.

Barrier. Any device designed to restrict access to "live" high-voltage electrical equipment.

Bond. A short conductor installed to provide electrical continuity.

Contractor. Any person or organisation appointed by Transnet to carry out work on its behalf.

Dead. Isolated and earthed.

Electrical Officer (Contracts). The person appointed in writing by the responsible Electrical Engineer in Transnet as the person who shall be consulted by the Contractor in all electrical matters to ensure that adequate safety precautions are taken by the Contractor.

Executive Officer. The person appointed by Transnet from time to time as the Executive Officer to act according to the rights and powers held by and obligations placed upon him in terms of the Contract.

High-Voltage. A voltage normally exceeding 1 000 volts.

Live. A conductor is said to be "live" when it is at a potential different from that of the earth or any other conductor of the system of which it forms a part.

Near. To be in such a position that a person's body or the tools he is using or any equipment he is handling may come within 3 metres of live exposed high-voltage electrical equipment.

Occupation. An authorisation granted by Transnet for work to be carried out under specified conditions on, over under or adjacent to railway lines.

Occupation Between Trains. An occupation during an interval between successive trains.

Project Manager. The person or juristic person appointed by Transnet from time to time as the Project Manager to administer the Contract according to the powers and rights held by and obligations placed upon him in terms of the Contract.

Responsible Representative. The responsible person in charge, appointed by a contractor, who has undergone specific training (and holds a certificate) to supervise staff under his control to work on, over, under or adjacent to railway lines and in the vicinity of high-voltage electrical equipment.

Supervisor. The person or juristic person appointed by Transnet from time to time as the Supervisor, to administer the Contractor's performance and execution of the Works according to the powers and rights held by and obligations placed upon the Supervisor in terms of the Contract.

Total Occupation. An occupation for a period when trains are not to traverse the section of line covered by the occupation.

Work on. Work undertaken on or so close to the equipment that the specified working clearances to the live equipment cannot be maintained.

Work Permit. A combined written application and authority to proceed with work on or near dead electrical equipment.

## **PART A - GENERAL SPECIFICATION**

### **2. AUTHORITY OF OFFICERS OF TRANSNET**

- 2.1 The Contractor shall co-operate with the officers of Transnet and shall comply with all instructions issued and restrictions imposed with respect to the Works which bear on the existence and operation of Transnet's railway lines and high-voltage equipment.
- 2.2 Without limiting the generality of the provisions of 2.1, any duly authorised representative of Transnet, having identified himself, may stop the work if, in his opinion, the safe passage of trains or the safety of Transnet assets or any person is affected. **CONSIDERATIONS OF SAFETY SHALL TAKE PRECEDENCE OVER ALL OTHER CONSIDERATIONS.**

### **3. CONTRACTOR'S REPRESENTATIVES**

- 3.1 The Contractor shall nominate Responsible Representatives of whom at least one shall be available at any hour for call-out in cases of emergency. The Contractor shall provide the Supervisor with the names, addresses and telephone numbers of the representatives.
- 3.2 The Contractor guarantees that he has satisfied himself that the Responsible Representative is fully conversant with this specification and that he shall comply with all his obligations in respect thereof.

### **4. OCCUPATIONS AND WORK PERMITS**

- 4.1 Work to be done during total occupation or during an occupation between trains or under a work permit shall be done in a manner decided by the Supervisor and at times to suit Transnet requirements.
- 4.2 The Contractor shall organise the Works in a manner, which will minimise the number and duration of occupations and work permits required.
- 4.3 Transnet will not be liable for any financial or other loss suffered by the Contractor arising from his failure to complete any work scheduled during the period of an occupation or work permit.
- 4.4 The Contractor shall submit to the Supervisor, in writing, requests for occupations or work permits together with details of the work to be undertaken, at least 14 days before they are required. Transnet does not undertake to grant an occupation or work permit for any particular date, time or duration.
- 4.5 Transnet reserves the right to cancel any occupation or work permit at any time before or during the period of occupation or work permit. If, due to cancellation or change in date or time, the Contractor is not permitted to start work under conditions of total occupation or work permit at the time arranged, all costs caused by the cancellation shall be born by the Contractor except as provided for in clauses 4.6 to 4.8.
- 4.6 When the Contractor is notified less than 2 hours before the scheduled starting time that the occupation or work permit is cancelled, he may claim reimbursement of his direct financial losses caused by the loss of working time up to the time his labour and plant are employed on other work, but not exceeding the period of the cancelled occupation or work permit.
- 4.7 When the Contractor is notified less than 2 hours before the schedule starting time, or during an occupation or work permit, that the duration of the occupation or work permit is reduced, he may claim reimbursement of his direct financial losses caused by the loss of working time due to the reduced duration of the occupation or work permit.
- 4.8 Reimbursement the Contractor for any loss of working time in terms of 4.6 and 4.7, shall be subject to his claims being submitted within 14 days of the event with full details of labour and plant

involved, and provided that the Supervisor certifies that no other work on which the labour and plant could be employed was immediately available.

- 4.9 Before starting any work for which an occupation has been arranged, the Contractor shall obtain from the Supervisor written confirmation of the date, time and duration of the occupation.
- 4.10 Before starting any work for which a work permit has been arranged, the Responsible Representative shall read and sign portion C of form No. T.1276 signifying that he is aware of the limits within which work may be undertaken. After the work for which the permit was granted has been completed, or when the work permit is due to be terminated, or if the permit is cancelled after the start, the same person who signed portion C shall sign portion D of the T.1276 form, thereby acknowledging that he is aware that the electrical equipment is to be made "live". The Contractor shall advise all his workmen accordingly.

## 5. SPEED RESTRICTIONS AND PROTECTION

- 5.1 When speed restrictions are imposed by Transnet because of the Contractor's activities, the Contractor shall organise and carry out his work so as to permit the removal of the restrictions as soon as possible.
- 5.2 When the Supervisor considers protection to be necessary the Contractor shall, unless otherwise agreed, provide all protection including flagmen, other personnel and all equipment for the protection of Transnet's and the Contractor's personnel and assets, the public and including trains. Transnet will provide training free of charge of the Contractor's flagmen and other personnel performing protection duties. The Contractor shall consult with the Supervisor, whenever he considers that protection will be necessary, taking into account the minimum permissible clearances set out in appendixes 1 to 4.
- 5.3 The Contractor shall appoint a Responsible Representative to receive and transmit any instruction, which may be given by Transnet personnel providing protection.

## 6. ROADS ON TRANSNET PROPERTY

The provision of clause 25 of the E.5, General Conditions of Contract, or clause 23 of the E.5 (MW), General Conditions of Contract for Maintenance Works, shall apply to the use of existing roads on Transnet's property.

## 7. CLEARANCES

- 7.1 No temporary works shall encroach on the appropriate minimum clearances set out in Annexure 1 BE97-01 Sheets 1,2, 3 and 5 of 5.

## 8. STACKING OF MATERIAL

- 8.1 The Contractor shall not stack any material closer than 3 m from the centre line of any railway line without prior approval of the Supervisor.

## 9. EXCAVATION, SHORING, DEWATERING AND DRAINAGE

- 9.1 Unless otherwise approved by the Supervisor any excavation adjacent to a railway line shall not encroach on the hatched area shown in Figure 1.

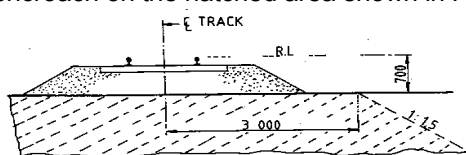


Fig. 1.

- 9.2 The Contractor shall provide at his own cost any shoring, dewatering or drainage of any excavation unless otherwise stipulated elsewhere in the Contract.
- 9.3 Where required by the Supervisor, drawings of shoring for any excavation under or adjacent to a railway line shall be submitted and permission to proceed obtained, before the excavation is commenced.
- 9.4 The Contractor shall prevent ingress of water to the excavation but where water does enter, he shall dispose of it as directed by the Supervisor.
- 9.5 The Contractor shall not block, obstruct or damage any existing drains either above or below ground level unless he has made adequate prior arrangements to deal with drainage.

10. **FALSEWORK FOR STRUCTURES**

- 10.1 Drawings of falsework for the construction of any structure over, under or adjacent to any railway line shall be submitted to the Supervisor and his permission to proceed obtained before the falsework is erected. Each drawing shall be given a title and a distinguishing number and shall be signed by a registered professional engineer certifying that he has checked the design of the falsework and that the drawings are correct and in accordance with the design.
- 10.2 After the falsework has been erected and before any load is applied, the Contractor shall submit to the Supervisor a certificate signed by a registered professional engineer certifying that he has checked the falsework and that it has been erected in accordance with the drawings. Titles and numbers of the drawings shall be stated in the certificate. Notwithstanding permission given by the Supervisor to proceed, the Contractor shall be entirely responsible for the safety and adequacy of the falsework.

11. **PILING**

- 11.1 The Supervisor will specify the conditions under which piles may be installed on Transnet property.

12. **UNDERGROUND SERVICES**

- 12.1 No pegs or stakes shall be driven or any excavation made before the Contractor has established that there are no underground services, which may be damaged thereby.
- 12.2 Any damage shall be reported immediately to the Supervisor, or to the official in charge at the nearest station, or to the traffic controller in the case of centralised traffic control.

13. **BLASTING**

- 13.1 The provisions of clause 23 of the E.5, General Conditions of Contract or clause 21 of the E.5 (MW), General Conditions of Contract for Maintenance Work, shall apply to all blasting operations undertaken in terms of the Contract.
- 13.2 The Contractor shall provide proof that he has complied with the provisions of clauses 10.17.1 to 10.17.4 of the Explosives Regulations (Act 26 of 1956 as amended).
- 13.3 Blasting within 500m of a railway line will only be permitted during intervals between trains. A person appointed by the Supervisor, assisted by flagmen with the necessary protective equipment, will be in communication with the controlling railway station.  
Only this person will be authorised to give the Contractor permission to blast, and the Contractor shall obey his instructions implicitly regarding the time during which blasting may take place.
- 13.4 The flagmen described in 13.3, where provided by Transnet, are for the protection of trains and Transnet property only, and their presence does not relieve the Contractor in any manner of his

responsibilities in terms of Explosives Act or Regulations, or any obligation in terms of this Contract.

13.5 The person described in 13.3 will record in a book provided and retained by Transnet the dates and times -

- (i) when each request is made by him to the controlling station for permission to blast;
- (ii) when blasting may take place;
- (iii) when blasting actually takes place; and
- (iv) when he advises the controlling station that the line is safe for the passage of trains.

13.6 Before each blast the Contractor shall record in the same book, the details of the blast to be carried out. The person appointed by the Supervisor and the person who will do the blasting shall both sign the book whenever an entry described in 13.5 is made.

13.7 The terms of clause 27 hereof shall be strictly adhered to.

#### 14. **RAIL TROLLEYS**

14.1 The use of rail trolleys or trestle trolleys on a railway line for working on high voltage equipment will be permitted only if approved by the Supervisor and under the conditions stipulated by him.

14.2 All costs in connection with such trolley working requested by the Contractor shall, unless otherwise agreed, be borne by the Contractor, excluding the costs of any train protection services normally provided free of charge by Transnet.

#### 15. **SIGNAL TRACK CIRCUITS**

15.1 Where signal track circuits are installed, the Contractor shall ensure that no material capable of conducting an electrical current makes contact between rails of a railway line/lines.

15.2 No signal connections on track-circuited tracks shall be severed without the Supervisor's knowledge and consent.

#### 16. **PENALTY FOR DELAYS TO TRAINS**

16.1 If any trains are delayed by the Contractor and the Supervisor is satisfied that the delay was avoidable, a penalty will be imposed on the Contractor of R5 000 per hour or part thereof for the period of delay, irrespective of the number of trains delayed.

**PART B - ADDITIONAL SPECIFICATION FOR WORK NEAR HIGH-VOLTAGE ELECTRICAL EQUIPMENT****17. GENERAL**

- 17.1 This specification is based on the contents of Transnet Freight Rail's publication SAFETY INSTRUCTIONS, HIGH-VOLTAGE ELECTRICAL EQUIPMENT, as amended, a copy of which will be made available on loan to the Contractor for the duration of the contract. These instructions apply to all work near live high-voltage equipment maintained and/or operated by Transnet, and the onus rests on the Contractor to ensure that he obtains a copy.
- 17.2 The Contractor's attention is drawn in particular to the contents of Part I, Sections 1 and 2 of the Safety Instructions : High-Voltage Electrical Equipment.
- 17.3 The Safety Instructions : High-Voltage Electrical Equipment cover the minimum safety precautions which must be taken to ensure safe working on or near high-voltage electrical equipment, and must be observed at all times. Should additional safety measures be considered necessary because of peculiar local conditions, these may be ordered by and at the discretion of the Electrical Officer (Contracts).
- 17.4 This specification must be read in conjunction with and not in lieu of the Safety Instructions : High-Voltage Electrical Equipment.
- 17.5 The Contractor shall obtain the approval of the Electrical Officer (Contracts) before any work is done which causes or could cause any portion of a person's body or the tools he is using or any equipment he is handling, to come within 3 metres of any live high-voltage equipment.
- 17.6 The Contractor shall regard all high-voltage equipment as live unless a work permit is in force.
- 17.7 Safety precautions taken or barriers erected shall comply with the requirements of the Electrical Officer (Contracts), and shall be approved by him before the work to be protected is undertaken by the Contractor. The Contractor shall, unless otherwise agreed, bear the cost of the provision of the barriers and other safety precautions required, including the attendance of Transnet staff where this is necessary.
- 17.8 No barrier shall be removed unless authorised by the Electrical Officer (Contracts).

**18. WORK ON BUILDINGS OR FIXED STRUCTURES**

- Before any work is carried out or measurements are taken on any part of a building, fixed structure or earthworks of any kind above ground level situated within 3 metres of live high-voltage equipment, the Electrical Officer (Contracts) shall be consulted to ascertain the conditions under which the work may be carried out.
- 18.2 No barrier erected to comply with the requirements of the Electrical Officer (Contracts) shall be used as temporary staging or shuttering for any part of the Works.
- 18.3 The shuttering for bridge piers, abutments, retaining walls or parapets adjacent to or over any track may be permitted to serve as a barrier, provided that it extends at least 2,5 metres above any working level in the case of piers, abutments and retaining walls and 1,5 metres above any working level in the case of parapets.

**19. WORK DONE ON OR OUTSIDE OF ROLLING STOCK, INCLUDING LOADING OR UNLOADING**

- 19.1 No person shall stand, climb or work whilst on any platform, surface or foothold higher than the normal unrestricted places of access, namely -
- (i) the floor level of trucks;

- (ii) external walkways on diesel, steam and electric locomotives, steam heat vans, etc. and
- (iii) walkways between coaches and locomotives.

When in these positions, no person may raise his hands or any equipment or material he is handling above his head.

- 19.2 In cases where the Contractor operates his own rail mounted equipment, he shall arrange for the walkways on this plant to be inspected by the Electrical Officer (Contracts) and approved, before commencement of work.
- 19.3 The handling of long lengths of material such as metal pipes, reinforcing bars, etc should be avoided, but if essential they shall be handled as nearly as possible in a horizontal position below head height.
- 19.4 The Responsible Representative shall warn all persons under his control of the danger of being near live high-voltage equipment, and shall ensure that the warning is fully understood.
- 19.5 Where the conditions in 19.1 to 19.3 cannot be observed the Electrical Officer (Contracts), shall be notified. He will arrange for suitable Safety measures to be taken. The Electrical Officer (Contracts), may in his discretion and in appropriate circumstances, arrange for a suitable employee of the Contractor to be specially trained by Transnet Freight Rail and at its costs, as an Authorised Person to work closer than 3 metres from live overhead conductors and under such conditions as may be imposed by the Senior responsible Electrical Engineer in Transnet.

## 20. **USE OF EQUIPMENT**

### 20.1 Measuring Tapes and Devices

20.1.1 Measuring tapes may be used near live high-voltage equipment provided that no part of any tape or a person's body comes within 3 metres of the live equipment.

20.1.2 In windy conditions the distance shall be increased to ensure that if the tape should fall it will not be blown nearer than 3 metres from the live high-voltage equipment.

20.1.3 Special measuring devices longer than 2 metres such as survey staves and rods may be used if these are of non-conducting material and approved by the responsible Electrical Engineer in Transnet, but these devices must not be used within 3 metres of live high-voltage equipment in rainy or wet conditions.

20.1.4 The assistance of the Electrical Officer (Contracts) shall be requested when measurements within the limits defined in 20.1.1 to 20.1.3 are required.

20.1.5 The restrictions described in 20.1.1 to 20.1.3 do not apply on a bridge deck between permanent parapets nor in other situations where a barrier effectively prevents contact with the live high-voltage equipment.

### 20.2 Portable Ladders

20.2.1 Any type of portable ladder longer than 2 metres may only be used near live high-voltage equipment under the direct supervision of the Responsible Representative. He shall ensure that the ladder is always used in such a manner that the distance from the base of the ladder to any live high-voltage equipment is greater than the fully extended length of the ladder plus 3 metres. Where these conditions cannot be observed, the Electrical Officer (Contracts) shall be advised, and he will arrange for suitable safety measures to be taken.

## 21. **CARRYING AND HANDLING MATERIAL AND EQUIPMENT**

21.1 Pipes, scaffolding, iron sheets, reinforcing bars and other material, which exceeds 2 metres in

length, shall be carried completely below head height near live high-voltage equipment. For maximum safety two or more persons so as to maintain it as nearly as possible in a horizontal position should carry such material. The utmost care must be taken to ensure that no part of the material comes within 3 metres of any live high-voltage equipment.

21.2 Long lengths of wire or cable shall never be run out in conditions where a part of a wire or cable can come within 3 metres of any live high-voltage equipment unless the Electrical Officer (Contracts) has been advised and has approved appropriate safety precautions.

21.3 The presence of overhead power lines shall always be taken account of especially when communications lines or cables or aerial cables, stay wires, etc. are being erected above ground level.

22. **PRECAUTIONS TO BE TAKEN WHEN ERECTING OR REMOVING POLES, ANTENNAE, TREES ETC.**

22.1 A pole may be handled for the purpose of erection or removal near high-voltage equipment under the following conditions:

- (i) If the distance between the point at which the pole is to be erected or removed and the nearest live high-voltage equipment is more than the length of the pole plus 3 metres, the work shall be supervised by the Responsible Representative.
- (ii) If the distance described in (i) is less than the length of the pole plus 3 metres, the Electrical Officer (Contracts) shall be consulted to arrange for an Authorised Person to supervise the work and to ensure that the pole is earthed where possible. The pole shall be kept in contact with the point of erection, and adequate precautions shall be taken to prevent contact with live high-voltage equipment.

22.2 The cost of supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.

22.3 The provisions of clauses 22.1 and 22.2 shall also apply to the erection or removal of columns, antennae, trees, posts, etc.

23. **USE OF WATER**

23.1 No water shall be used in the form of a jet if it can make contact with any live high-voltage equipment or with any person working on such equipment.

24. **USE OF CONSTRUCTION PLANT**

24.1 "Construction plant" entails all types of plant including cranes, piling frames, boring machines, excavators, draglines, dewatering equipment and road vehicles with or without lifting equipment.

24.2 When work is being undertaken in such a position that it is possible for construction plant or its load to come within 3 metres of live high-voltage equipment, the Electrical Officer (Contracts) shall be consulted. He will arrange for an Authorised Person to supervise the work and to ensure that the plant is adequately earthed. The Electrical Officer (Contracts) will decide whether further safety measures are necessary.

24.3 The cost of any supervision by an Authorised Person and the provision of earthing shall, unless otherwise agreed, be borne by the Contractor.

24.4 When loads are handled by cranes, non-metallic rope hand lines shall be used, affixed to such loads so as to prevent their swinging and coming within 3 metres of live high-voltage equipment.

24.5 Clauses 24.1 to 24.4 shall apply mutatis mutandis to the use of maintenance machines of any nature.

**25. WORK PERFORMED UNDER DEAD CONDITIONS UNDER COVER OF A WORK PERMIT**

25.1 If the Responsible Representative finds that the work cannot be done in safety with the high-voltage electrical equipment live, he shall consult the Electrical Officer (Contracts) who will decide on the action to be taken.

25.2 If a work permit is issued the Responsible Representative shall -

- (i) before commencement of work ensure that the limits within which work may be carried out have been explained to him by the Authorised Person who issued the permit to him, and that he fully understands these limits.
- (ii) sign portion C of the permit before commencement of work;
- (iii) explain to all persons under his control the limits within which work may be carried out, and ensure that they fully understand these limits;
- (iv) care for the safety of all persons under his control whilst work is in progress; and
- (v) withdraw all personnel under his control from the equipment on completion of the work before he signs portion D of the work permit.

**26. TRACTION RETURN CIRCUITS IN RAILS**

26.1 DANGEROUS CONDITIONS CAN BE CREATED BY REMOVING OR SEVERING ANY BOND.

26.2 Broken rails with an air gap between the ends, and joints, at which fishplates are removed under "broken bond" conditions, are potentially lethal. The rails on either side of an air gap between rail ends on electrified lines shall not be touched simultaneously until rendered safe by Transnet personnel.

26.3 The Contractor shall not break any permanent bonds between rails or between rails and any structure. He shall give the Supervisor at least 7 days written notice when removal of such bonds is necessary.

26.4 No work on the track which involves interference with the traction return rail circuit either by cutting or removing the rails, or by removal of bonds shall be done unless the Electrical Officer (Contracts) is consulted. He will take such precautions as may be necessary to ensure continuity of the return circuit before permitting the work to be commenced.

**27. BLASTING**

27.1 The Contractor shall obtain the permission of the Electrical Officer (Contracts) before blasting, and shall give at least 14 days notice of his intention to blast.

27.2 No blasting shall be done in the vicinity of electrified lines unless a member of Transnet's electrical personnel is present.

27.3 The terms of clause 13 hereof shall be strictly adhered to.

**28. HIGH-VOLTAGE ELECTRICAL EQUIPMENT NOT MAINTAINED AND/OR OPERATED BY TRANSNET**

Where the work is undertaken on or near high-voltage electrical equipment which is not maintained and/or operated by Transnet, the Occupational Health and Safety Act No. 85 of 1993, and Regulations and Instructions, or the Mines Health and Safety Act (Act 29 of 1996), shall apply.

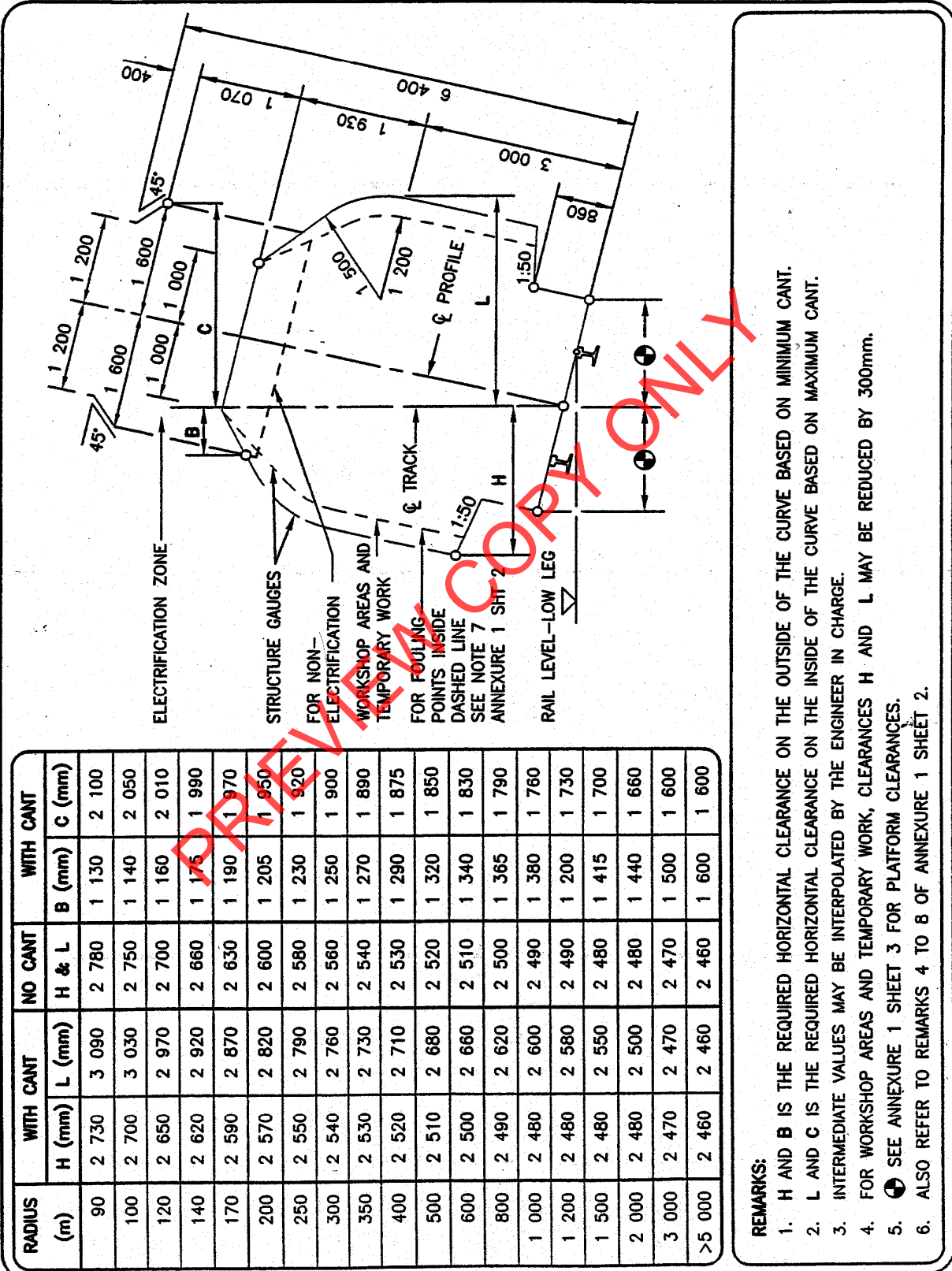
Such equipment includes: -

- (i) Eskom and municipal equipment;
- (ii) the Contractor's own power supplies; and
- (iii) electrical equipment being installed but not yet taken over from the Contractor.

**PREVIEW COPY ONLY**

ANNEXURE 1  
SHEET 1 of 5  
AMENDMENT

HORIZONTAL CLEARANCES :  
1 065mm TRACK GAUGE



| RADIUS (m) | WITH CANT |        | NO CANT |        | WITH CANT |        |
|------------|-----------|--------|---------|--------|-----------|--------|
|            | H (mm)    | L (mm) | H & L   | B (mm) | C (mm)    | G (mm) |
| 90         | 2 730     | 3 090  | 2 780   | 1 130  | 2 100     | 2 100  |
| 100        | 2 700     | 3 030  | 2 750   | 1 140  | 2 050     | 2 050  |
| 120        | 2 650     | 2 970  | 2 700   | 1 160  | 2 010     | 2 010  |
| 140        | 2 620     | 2 920  | 2 660   | 1 175  | 1 990     | 1 990  |
| 170        | 2 590     | 2 870  | 2 630   | 1 190  | 1 970     | 1 970  |
| 200        | 2 570     | 2 820  | 2 600   | 1 205  | 1 950     | 1 950  |
| 250        | 2 550     | 2 790  | 2 580   | 1 230  | 1 920     | 1 920  |
| 300        | 2 540     | 2 760  | 2 560   | 1 250  | 1 900     | 1 900  |
| 350        | 2 530     | 2 730  | 2 540   | 1 270  | 1 890     | 1 890  |
| 400        | 2 520     | 2 710  | 2 530   | 1 290  | 1 875     | 1 875  |
| 500        | 2 510     | 2 680  | 2 520   | 1 320  | 1 850     | 1 850  |
| 600        | 2 500     | 2 660  | 2 510   | 1 340  | 1 830     | 1 830  |
| 800        | 2 490     | 2 620  | 2 500   | 1 365  | 1 790     | 1 790  |
| 1 000      | 2 480     | 2 600  | 2 490   | 1 380  | 1 760     | 1 760  |
| 1 200      | 2 480     | 2 580  | 2 490   | 1 200  | 1 730     | 1 730  |
| 1 500      | 2 480     | 2 550  | 2 480   | 1 415  | 1 700     | 1 700  |
| 2 000      | 2 480     | 2 500  | 2 480   | 1 440  | 1 660     | 1 660  |
| 3 000      | 2 470     | 2 470  | 2 470   | 1 500  | 1 600     | 1 600  |
| >5 000     | 2 460     | 2 460  | 2 460   | 1 600  | 1 600     | 1 600  |

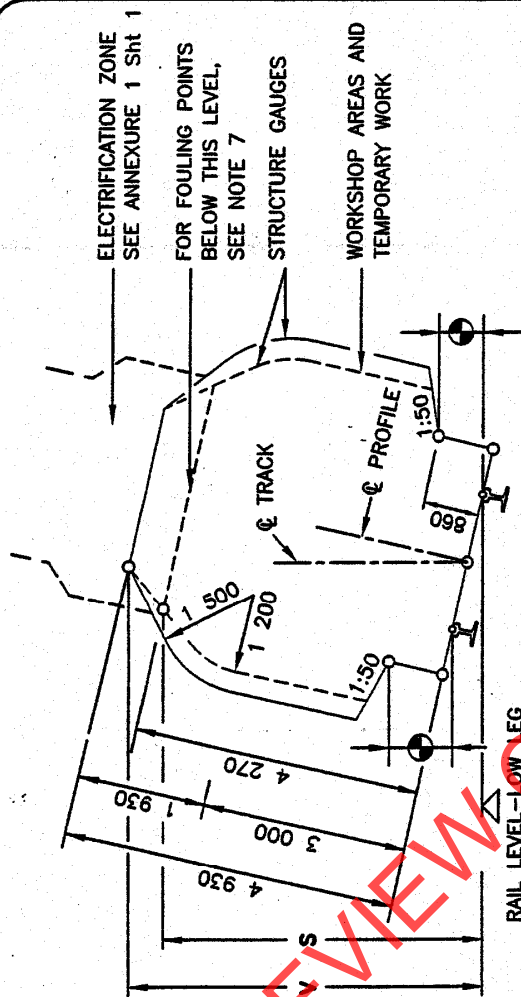
- REMARKS:
1. H AND B IS THE REQUIRED HORIZONTAL CLEARANCE ON THE OUTSIDE OF THE CURVE BASED ON MINIMUM CANT.
  2. L AND C IS THE REQUIRED HORIZONTAL CLEARANCE ON THE INSIDE OF THE CURVE BASED ON MAXIMUM CANT.
  3. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
  4. FOR WORKSHOP AREAS AND TEMPORARY WORK, CLEARANCES H AND L MAY BE REDUCED BY 300mm.
  5. ⚡ SEE ANNEXURE 1 SHEET 3 FOR PLATFORM CLEARANCES.
  6. ALSO REFER TO REMARKS 4 TO 8 OF ANNEXURE 1 SHEET 2.

BE 97-01 Sht 1 of 5      DATE : JUNE 2000



ANNEXURE 1  
SHEET 2 of 5  
AMENDMENT

VERTICAL CLEARANCES :  
1 065mm TRACK GAUGE



| LOCATION  | RADIUS (mm) | ELECTRIFIED (PRESENT OR FUTURE) |             |
|---|-------------|---------------------------------|-------------|
|   |             | 3KV & 25KV V (mm)               | 50KV V (mm) |
| * BELOW<br>* ALL AREAS OTHER THAN THOSE INDICATED BY                                | 100         | 4 470                           | 5 400       |
|   | 300         | 4 410                           | 5 370       |
|   | 600         | 4 370                           | 5 350       |
|   | 1 000       | 4 350                           | 5 340       |
|   | 1 500       | 4 310                           | 5 310       |
|   | 2 000       | 4 290                           | 5 290       |
|   | >3 000      | 4 270                           | 5 280       |
| * OVER OR NEAR POINTS AND CROSSING IF REQUIRED BY ELECTRICAL IRRESPECTIVE OF RADIUS |             | 5 650                           | 6 000       |

REMARKS:

1. V IS THE REQUIRED VERTICAL CLEARANCE EXCEPT WHERE REDUCED CLEARANCE S APPLIES.
2. S IS THE MINIMUM VERTICAL CLEARANCE FOR STRUCTURES AND TEMPORARY WORK OVER NON-ELECTRIFIED LINES.
3. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
4. FOR APPLICATION AT CURVES
  - 4.1 APPLY INCREASED CLEARANCES FOR CURVES TO POINTS 3m BEYOND THE ENDS OF THE CIRCULAR CURVE.
  - 4.2 REDUCE CLEARANCES AT A UNIFORM RATE OVER THE REMAINDER OF THE TRANSITION CURVE.
  - 4.3 FOR NON-TRANSITIONED CURVES REDUCE AT A UNIFORM RATE OVER A LENGTH OF 15m ALONG STRAIGHTS.
5. NEW STRUCTURES: SEE BRIDGE CODE.
6. TUNNELS: SEE DRAWING BE 82-35.
7. FOULING POINTS: SEE CLAUSE 8.1.
8. CLEARANCES ARE BASED ON 15m BOGIE CENTRES AND 21,2m VEHICLE BODY LENGTH.
9. SEE ANNEXURE 1 SHEET 3 FOR PLATFORM CLEARANCES.

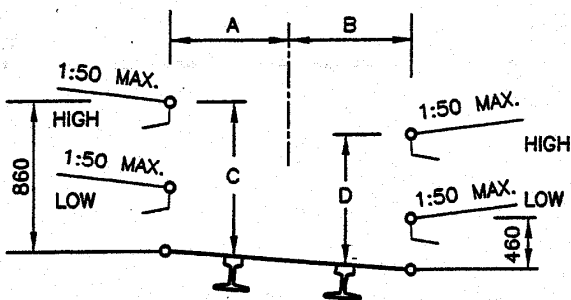
BE 97-01 Sht 2 of 5 DATE : JUNE 2000

ANNEXURE 1  
SHEET 3 of 5  
AMENDMENT

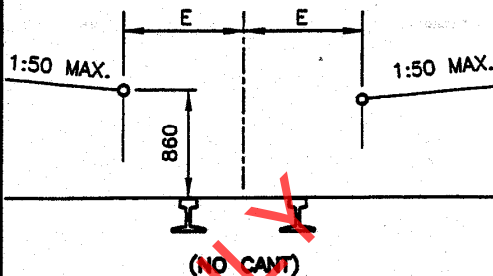
CLEARANCES : PLATFORMS

PLATFORMS : TRACK GAUGE 1 065mm

PASSENGERS



GOODS

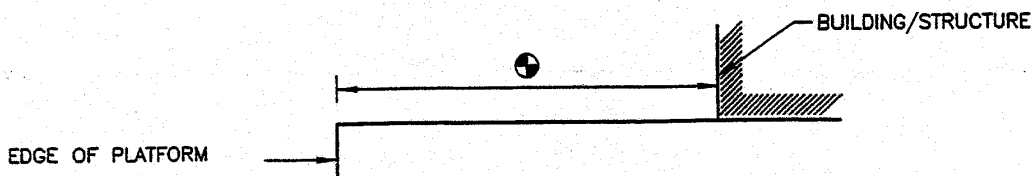


| RADIUS (m) | A (mm) | B (mm) | C (mm) | D (mm) | E (mm) |
|------------|--------|--------|--------|--------|--------|
| 90         | 1 690  | 1 820  | 890    | 810    | 1 840  |
| 100        | 1 650  | 1 790  | 890    | 810    | 1 810  |
| 120        | 1 610  | 1 740  | 890    | 810    | 1 760  |
| 140        | 1 580  | 1 700  | 890    | 810    | 1 720  |
| 170        | 1 550  | 1 660  | 890    | 810    | 1 690  |
| 200        | 1 530  | 1 630  | 890    | 820    | 1 670  |
| 250        | 1 520  | 1 600  | 890    | 820    | 1 640  |
| 300        | 1 520  | 1 580  | 890    | 830    | 1 620  |
| 350        | 1 520  | 1 560  | 880    | 830    | 1 600  |
| 400        | 1 520  | 1 550  | 880    | 840    | 1 590  |
| 500        | 1 520  | 1 540  | 880    | 850    | 1 580  |
| 600        | 1 520  | 1 530  | 870    | 850    | 1 570  |
| 800        | 1 520  | 1 520  | 860    | 860    | 1 560  |
| 1 200      | 1 520  | 1 520  | 860    | 860    | 1 550  |
| 2 000      | 1 520  | 1 520  | 860    | 860    | 1 540  |
| 3 000      | 1 520  | 1 520  | 860    | 860    | 1 530  |
| STRAIGHT   | 1 520  | 1 520  | 860    | 860    | 1 520  |

REMARKS:

1. NO CANT TO BE APPLIED EXCEPT WHEN THE GOODS PLATFORM IS ON A RUNNING LINE.
2. INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
3. 8m TO MAIN STATION-BUILDINGS AND 3m TO ALL OTHER STRUCTURES.
4. TOLERANCES : SEE CLAUSE 8.0.10.

STRUCTURES ON PLATFORMS : 1 065mm AND 610mm TRACK GAUGE



BE 97-01 Sht 3 of 5 DATE : JUNE 2000

ANNEXURE 1  
SHEET 5 of 5  
AMENDMENT

CLEARANCES : 610mm TRACK GAUGE

| RADIUS (m) | F (mm) |
|------------|--------|
| 50         | 1 550  |
| 60         | 1 510  |
| 80         | 1 460  |
| 100        | 1 430  |
| 120        | 1 410  |
| 140        | 1 390  |
| 170        | 1 380  |
| 200        | 1 370  |
| 250        | 1 360  |
| 300        | 1 350  |
| 600        | 1 330  |
| 1 000      | 1 320  |
| >2 000     | 1 320  |
| STRAIGHT   | 1 310  |

| RADIUS (m) | WITH CANT |        | NO CANT    |            | V (mm) |
|------------|-----------|--------|------------|------------|--------|
|            | H (mm)    | L (mm) | H & L (mm) | H & L (mm) |        |
| 50         | 2 370     | 2 490  | 2 400      | 2 400      | 4 320  |
| 70         | 2 310     | 2 420  | 2 330      | 2 330      | 4 310  |
| 100        | 2 260     | 2 370  | 2 280      | 2 280      | 4 310  |
| 140        | 2 220     | 2 340  | 2 250      | 2 250      | 4 310  |
| 200        | 2 200     | 2 300  | 2 220      | 2 220      | 4 300  |
| 300        | 2 190     | 2 270  | 2 200      | 2 200      | 4 300  |
| 500        | 2 180     | 2 230  | 2 190      | 2 190      | 4 290  |
| 700        | 2 170     | 2 200  | 2 180      | 2 180      | 4 270  |
| 1 000      | 2 170     | 2 170  | 2 170      | 2 170      | 4 270  |
| >2 000     | 2 160     | 2 160  | 2 160      | 2 160      | 4 270  |

**REMARKS:**

- H IS THE MINIMUM HORIZONTAL CLEARANCE ON THE OUTSIDE OF THE CURVE BASED ON MINIMUM CANT.
- L IS THE MINIMUM HORIZONTAL CLEARANCE ON THE INSIDE OF THE CURVE BASED ON MAXIMUM CANT.
- V IS THE MINIMUM VERTICAL CLEARANCE.
- FOR APPLICATION AT CURVES:
  - 1 APPLY INCREASED CLEARANCES FOR CURVES TO POINTS 2m BEYOND THE ENDS OF THE CIRCULAR CURVE.
  - 2 REDUCE CLEARANCES AT A UNIFORM RATE OVER THE REMAINDER OF THE TRANSITION CURVE.
  - 3 FOR NON-TRANSITIONED CURVES REDUCE AT A UNIFORM RATE OVER A LENGTH OF 18m ALONG STRAIGHTS.
- INTERMEDIATE VALUES MAY BE INTERPOLATED BY THE ENGINEER IN CHARGE.
- ALSO REFER TO REMARKS 5, 6 AND 7 OF ANNEXURE 1 SHEET 2.
- CLEARANCES ARE BASED ON 9 700mm BOGIE CENTRES AND 13 700mm VEHICLE BODY LENGTH.
- SEE ANNEXURE 1 SHEET 3 FOR STRUCTURES ON PLATFORMS.

BE 97-01 Sht 5 of 5 DATE : JUNE 2000

# Part C4

## Site Information

### Part C4

#### SITE INFORMATION

The project covers nineteen (19) substations spanning over two (2) depots. The Depots and the number of sites per depot are listed below.

- Ermelo- 13 sites
- Durban – 6 sites

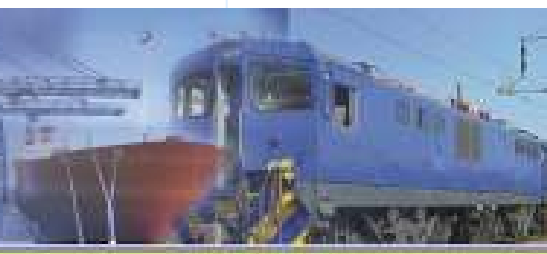
Names of Substations are listed in 'Description of the Work' (Section 1 of Part C3) as well as on the Schedule of Quantities and Prices (Part C2.2). Drawing CEE-TVD-2 Sht 1-2 is a map that shows the location of these sites. Accessibility of the sites from the main roads is normally via a service road, whose condition may vary depending on amongst other things, vegetation and rainfall. Tenderer's are advised to take note of this during the site visits. Furthermore, the security requirements at each site must be discussed with the relevant Depot.

Due to the nature of work involved (High Voltage), access to these sites can only be granted under supervision from the relevant Depot, therefore, no work is to be undertaken outside normal working hours. No accommodation of staff is permitted on any of the sites.

The availability of water and electricity supplies cannot be guaranteed at any of the sites, the tenderers therefore shall make provision for this in the rates submitted.

The substations do not have ablution facilities, the contractors therefore have to make provision for such in their rates.

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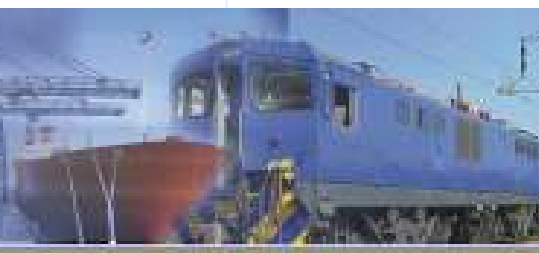
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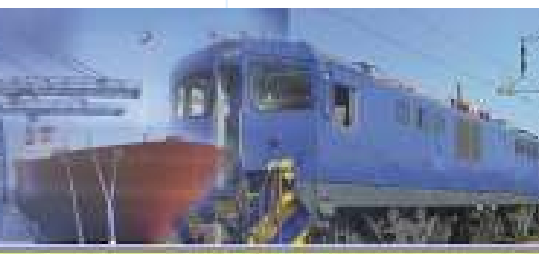


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**Introduction**

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## Introduction

TRANSNET LIMITED insure all Projects / Contracts on a Principal Controlled Insurance Programme basis (including the Assembly and/or Erection of Plant and Machinery) in respect of Contract Works and Contractors Public Liability.

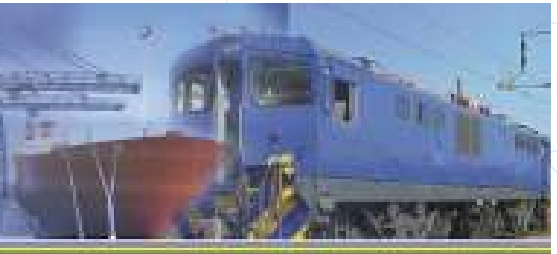
## Philosophy of the programme

- Transnet Limited and its Business Units wish to control the risk exposures in this regard.
- Transnet Limited, as a large organization, bulk-buys - resulting in preferential rates and cover.
- Simplified administration.
- Eliminates potential problems which usually occur when individual Contractors are responsible to arrange separate insurance.
- Includes the Contractor and/or Subcontractors as an insured party.

- It is therefore important that Tender and eventual Contract documents reflect the fact that Transnet as the Principal (i.e. the Employer) arranges certain covers which incorporates cover on behalf of Contractor's and / or Subcontractor's.
- The concept does not relieve the contracting parties of their responsibilities for, amongst others, care of the works and liabilities to third parties

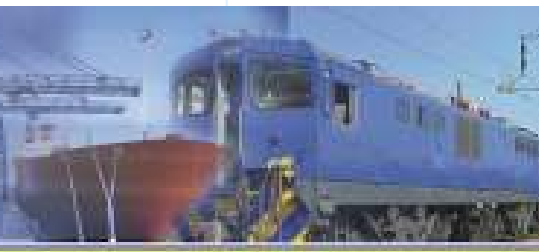


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## Insurance Responsibilities

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## Insurance Responsibilities

### 1. Cover arranged by Transnet as the Principal (Employer)

#### 1.1 Insurance Cover Applicable To All Contracts

##### 1.1.1 Contract Works Cover

Covering fortuitous physical loss or damage to the works, temporary works and materials for incorporation into the works whilst in transit and whilst at the contract site.

Limited to **R100,000,000** any one contract.

##### 1.1.2 Contractors Public Liability Cover

Covering legal liability arising out of or connection with the performance of the works on the contract site or sites designated by the Principal for purposes of the performance of the contract.

Limited to **R10,000,000** any one occurrence.

##### 1.1.3 Riot / Strike Cover (Contract Works)

Provided by:

**SASRIA** (*South African Special Risks Insurance Association*) in respect of risks with RSA.

**NASRIA** (*Namibian Special Risks Insurance Association*) in respect of risks within Namibia.

#### 1.2 Additional Insurances (Optional)

##### 1.2.1 Marine Transit Cover

Covering imports until delivered and checked on site.

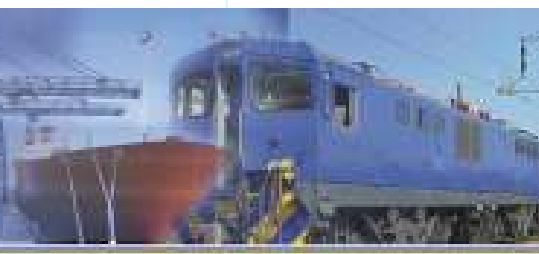
##### 1.2.2 Project Delay Cover

Covering consequential financial exposures due to delays following indemnifiable loss or damage to the works.

##### 1.2.3 Removal of Lateral Support

Covering legal liability incurred in respect removal of or weakening of or interference with support to land or property or buildings adjacent to, on or in the vicinity of the Contract site.

Limit of indemnity **R5,000,000** any one occurrence.



- The above information (including limits of insurance purchased) should be clearly spelt out in Tender and eventual Contract documentation including the deductible (excess) which are applicable and the fact that Contractor's and/or Subcontractor's are responsible for the deductible.

## 2. Cover to be arranged by Contractor's/Subcontractor's

All Contractor's/Subcontractor's still remain fully responsible to arrange insurance in respect of the following:

- As prescribed by the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993 as amended.
- Employers Common Law Liability.
- Own plant, machinery, equipment and tools.
- Motor Vehicles Liability.
- Professional Indemnity (Defective Design).

- This should also be clearly spelt out in Tender and eventual Contract documentation.

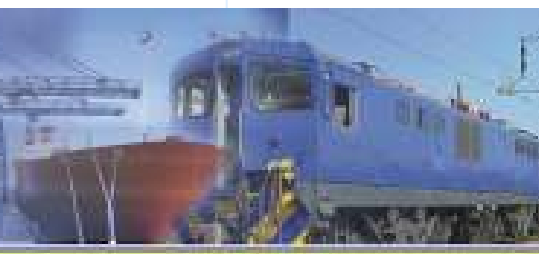
## 3. Cover to be arranged by Consulting Engineers, Architects & Other Professionals

Professional Indemnity (defects in Design, Plan or Specification).

Please ensure that Professional Service Providers do not contract out of their liability in this regard. (Please refer to Transnet Group Insurance for recommendation and approved limits).



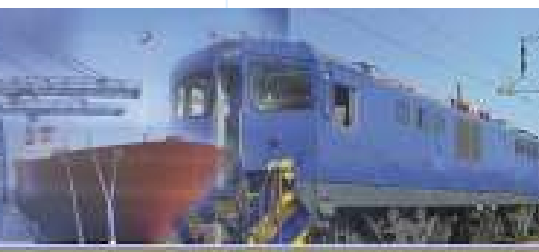
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## Summary of Cover

General

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## Summary of Cover

### The Insured Parties

- Transnet Limited and / or its Affiliated / Subsidiary / Associated Companies as Principal or Employer.
- All Contractor's undertaking work for or on behalf of the Principal in execution of the Contract.
- All Subcontractor's employed by the Contractor and all other Subcontractor's (whether nominated or otherwise) engaged in the fulfillment of the Contractor.
- To the extent required by any Contract or Agreement suppliers manufacturers vendors or other persons engaged on the contract sites but only to the extent of loss damage or liability originating at the Contract Site (other than while the Property Insured is in transit) arising out of the performance of their Contract Site obligations.

### Cover

- Contract Works – as detailed herein.
- Contractors Public Liability – as detailed herein.

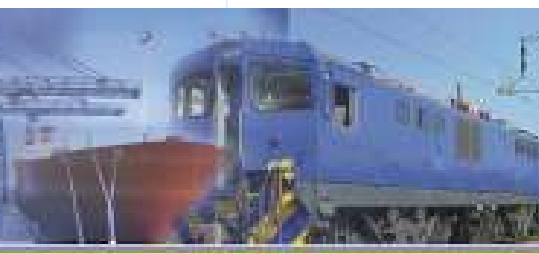
### Insured Contracts

- All contracts up to a maximum value of R100,000,000 any one contract.
- Limited to a maximum contract period of 36 months followed by a maximum Defects Liability / Maintenance period of 12 months.

### Excluded Contracts

- Where the contract value exceeds R100,000,000.
- Where the contracted duration of the contract exceeds 36 months.
- Where contracted Defects Liability / Maintenance period exceeds 12 months.
- Contracts involving harbours, dams, tunneling, mining, shaft sinking, underground work, quarrying, alterations to water courses being River Diversions or Cofferdams.
- Contracts outside of the territorial limits.

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- Contracts involving the installation of plant intended for the processing of hydrocarbons which terms shall include but not be limited to plant intended for the processing of petrochemicals ammonia fertilizers and the like and shall be deemed to include any plant which for its commercial operation requires exothermic reaction by the introduction of catalysts.
- On an existing airport runway or airstrip or in or on any aircraft.

## Contract Site

Any location upon which the Insured Contract(s) is to be executed or carried out as more fully defined in the Insured Contract(s) documents together with so much of the surrounding area as may be designated for the performance of the Insured Contract(s).

## Territorial Limits

The Republic of South Africa and to the extent permitted by the applicable Insurance Acts the territories of Lesotho, Namibia, Swaziland, Botswana, Zimbabwe and Mozambique.

### N.B.

In terms of local legislation enacted in some of the above territories it is required that insurance cover be placed within their local markets. It is therefore important that the Broker be advised timeously (prior to Tender documents being issued) should any contracts, whether as Principal or Contractor, take place in any of the above territories.

If Contracts are to take place in any territories not listed above, the Broker also needs to be advised of same at feasibility stage.

## Cover Limitations / Warranties

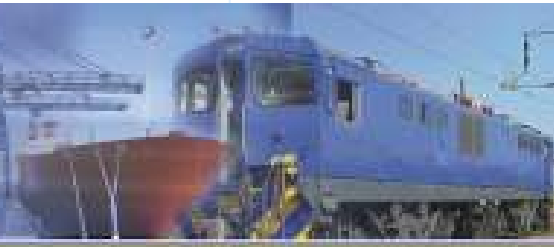
### Unsealed / Unprimed Base Course

- Unsealed / unprimed base course – cover limited to a maximum of 4,000 metres.

### Open Trench

- Open trench – cover limited to a maximum indemnity of 4,000 metres.

- It is essential that the above limitations are brought to the attention of Contractor's. Where this restriction is not practical, specific arrangements for cover can be made with Underwriters. They will, however, require detailed underwriting information and an additional premium may be charged.



**Laid Pipes**

- Pipes with a diameter not exceeding 500mm are to be end capped on the termination of each days work to avoid ingress of mud silt water debris detritus and the like.
- Pipes with a diameter exceeding 500mm are to be capped on the termination of each days work with steel mesh to allow ingress of water to avoid floatation but avoiding ingress of large debris or detritus.

**NB** If above not conformed with cover is forfeited.

**Rail Track Re-Profiling**

- The maximum speed of any grinding unit shall not exceed 11.00km per hour.
- All Guards, Curtains, Spark Deflectors are to be in place and correctly positioned prior to the commencement of each grind.
- Maximum grinding distance in any one execution shall not exceed 10,000 metres.
- Any changes in prevailing weather conditions must be recorded and appropriate remedial action taken.
- The Insured Parties are to comply with all Fire Fighting requirements as set out in the Project Specification For Track Maintenance With An On Track Grinding / Profiling Machine and any amendments / deviations to this Project Specification are to be advised to the Insurer prior to work being undertaken.

**NB** If above not conformed with cover is forfeited.

It is essential that the above Warranties are brought to the attention of Contractor's.

**Used Plant – Basis of Loss Settlement**

Insured property which has operated under service conditions prior to attachment of cover:-

- Up to 5 years – cost of repair / reinstatement / replacement.
- In excess of 5 years - agreed value (calculated on basis of each life year (or part thereof) on present day New Replacement Value reduced proportionally over 20 years subject to residual of 20%).

**Rating Structure**

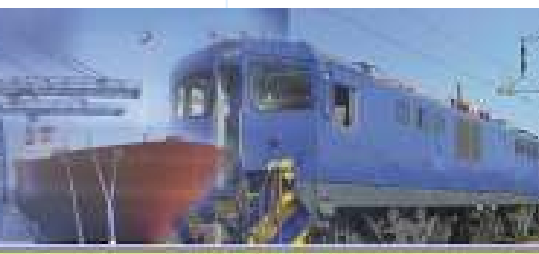
- The rates include both Contract Works and Contractors Public Liability cover per current policy limits, terms and conditions.

|   |   |                    |        |           |        |        |       |
|---|---|--------------------|--------|-----------|--------|--------|-------|
| <ul style="list-style-type: none"> <li>● Minimum premium requirement are:-</li> </ul> | <table border="0"> <tr> <td style="padding-left: 20px;">Track Re-profiling</td> <td style="text-align: right;">R8,000</td> </tr> <tr> <td style="padding-left: 20px;">All Other</td> <td style="text-align: right;">R4,000</td> </tr> <tr> <td style="padding-left: 20px;">SASRIA</td> <td style="text-align: right;">R 250</td> </tr> </table> | Track Re-profiling | R8,000 | All Other | R4,000 | SASRIA | R 250 |
| Track Re-profiling  | R8,000  |                    |        |           |        |        |       |
| All Other   | R4,000  |                    |        |           |        |        |       |
| SASRIA  | R 250   |                    |        |           |        |        |       |
|   | (Above are inclusive of VAT)  |                    |        |           |        |        |       |

- To extend the contract period beyond 36 months will attract an additional premium.  
(See Administrative Procedures herein).



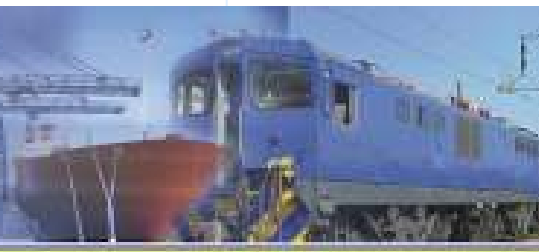
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## Summary of Cover

Contract Works Insurance

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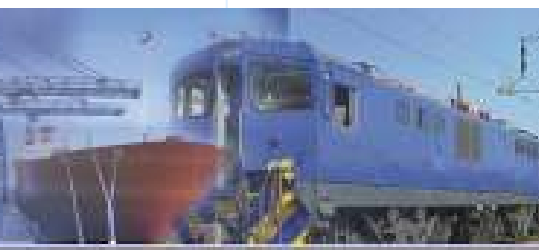
## 1. Contract Works Insurance

### Synopsis of Cover

Fortuitous Physical loss of or damage:

- During dismantling of property in connection with the Insured Contracts.
- Whilst in transit, including loading and unloading, or whilst temporarily stored at any premises en route to or from The Contract Site within the Territorial Limits;
- During the preparation of The Contract Site and thereafter until the Property Insured has been officially accepted by the Employer and becomes his responsibility by means of a Notice of Completion Certificate or similar evidence of legal transfer of risk in the whole or permanent works under the Insured Contract to the Employer;
- Where testing and commissioning of Property Insured is conducted by the Employer "completion" for purposes of this insurance to occur only after successful completion of all testing and commissioning of the whole of the permanent works under the Insured Contract;
- Where the permanent property insurance arranged by the Employer indemnify the Insured for completed portions of the Property Insured prior to completion of the whole of the permanent works under the Insured Contract, this insurance in respect of such completed portions of the Property Insured shall cease except as provided below:
- Work uncompleted or outstanding in terms of any certificate of completion, certificate of handover or similar document shall continue to be insured until its completion and the inception of the Contractual Defects Liability or Maintenance Period (as may be described in the Insured Contract) for such uncompleted or outstanding work where after the provisions of (g) below shall apply in respect of such work;
- During the Contractual Defects Liability or Maintenance Period (as may be described in the Insured Contract) pertaining to any part of the permanent works but only in respect of loss or damage:
  - i) arising from a cause occurring prior to commencement of such period of maintenance or defects liability period
  - ii) arising from any act or omission of the Insured their Servants, Agents, Suppliers or Subcontractors in pursuance of the Insured's obligations.

for which the Insured Contractor is responsible under the Contract.



### Contract Period Limitation

|  |           |
|--|-----------|
| Maximum Contract period                        | 36 months |
| Maximum Defects Liability / Maintenance Period | 12 Months |

### Limits of indemnity

|  |              |
|--|--------------|
| Contract Works (Any One Contract)                    | R100,000,000 |
| Work done on Marine vessels above the waterline      | R10,000,000  |
| Surrounding Property                                 | R5,000,000   |
| Fire Brigade Costs                                   | R500,000     |
| Removal to Gain Access                               | R1,000,000   |
| Documentation  | R100,000     |
| Debris Removal                                       | R2,500,000   |
| Claims Preparation Costs                             | R500,000     |
| Maximum testing / commissioning period               | 60 days      |
| Maximum un-sealed / un-primed base course limitation | 4,000 metres |
| Maximum open trench limitation                       | 4,000 metres |

### Deductibles

The deductible (excess) is the amount which the Contractor and/or Sub-Contractor is responsible for and this obligation must be reflected in the Tender and/or Contract Documents and the responsibility for same made clear.

The deductibles apply to each and every occurrence and in respect of all Contracts.

The deductibles are:

Loss or damage arising out of major perils (which term shall include storm, rain, tempest, wind, flood, theft and / or malicious damage, subsidence, collapse, earthquake, testing, commissioning

R 25,000

Loss or damage arising from any other cause

R 15,000

Removal of Debris

R 25,000

Loss or damage to Surrounding Property

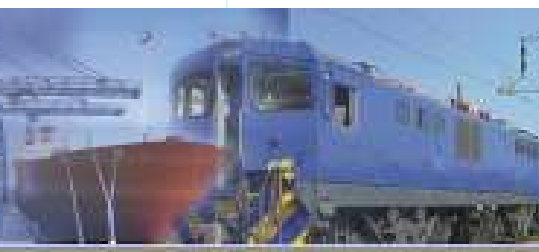
R 25,000

Loss or damage to Documentation

R 5,000

Road Reserve / Servitude

R250,000



## All Contracts Entailing Trenching and / or Layer Works

Following additional Deductibles apply over and above the aforesated deductibles: - i.e. in excess of 1,000 metres

Up to a maximum of 3,000metres 20% of loss / minimum R50,000

Up to a maximum of 4,000metres 20% of loss / minimum R100,000

- It is essential that this is brought to the attention of Contractor's. Where this restriction is not practical, specific arrangements for cover can be made with underwriters. They will, however, require detailed underwriting information and an additional premium may be charged.

## Property Insured

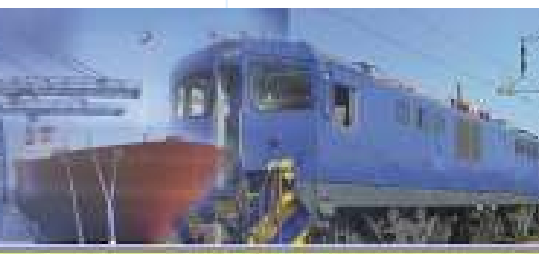
The actual Contract Works and all material intended for incorporation into the Works (*including Free Issue Material the value of which has to be included in the Contract Value declared*) and Temporary Works.

### N.B.

Temporary works does not include mobile plant, or works intended to be removed from the Contract Site on completion of the Contract (other than scaffolding shuttering and formwork or construction equipment specifically designed and / or constructed from the Insured Contract and which is not intended for immediate re-use on another contract) or have no residual value at completion of the Contract (other than scrap value).

## Main Exceptions

- The amount of the policy deductible.
- Loss or damage of money or the like.
- Aircraft, waterborne vessels or craft.
- Construction plant, tools or equipment.
- Losses by disappearance / shortage discovered by taking of routine inventory.
- Defective material workmanship design plan or specification (but resultant damage covered).
- Cost of re-design, improvement, betterment or alteration.
- Consequential loss.
- Liquidated damages or penalties for delay in connection with guarantee or performance or efficiency.

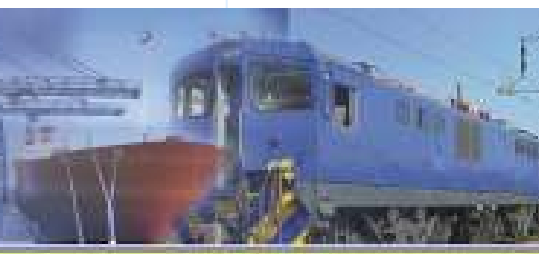


- Air transit (unless in territorial limits).
- Ocean transit or whilst in storage thereafter (unless immediately inspected by an independent party after offloading from vessel).
- During the Contractual Defects Liability or Maintenance Period (as may be described in the Insured Contract) pertaining to any part of the permanent works but only in respect of loss or damage:
  - i) arising from a cause occurring prior to commencement of such period of maintenance or defects liability period
  - ii) arising from any act or omission of the Insured his Servants or Agents, in the course of the work carried out in pursuance of the Insured's obligations with regard to maintenance under the Contract.
- Wear, tear, gradual deterioration rust, corrosion or oxidation and normal up-keep.
- Electrical or mechanical breakdown or explosion to machinery or plant which has operated under load conditions prior to commencement of the Insured Contract or which has occurred after the Testing / Commissioning Period specified in the Policy.
- Damage to any property insured due to ingress of mud, silt, water, debris unless pipe ends have been sealed on termination of each days work by means of end caps as prescribed in the policy.
- Damage to any unsealed / unprimed or base course in excess of limitations as stated in the policy.
- Damage to any open trench in excess of the limitations as stated in the policy.
- War, asbestos and nuclear risks.

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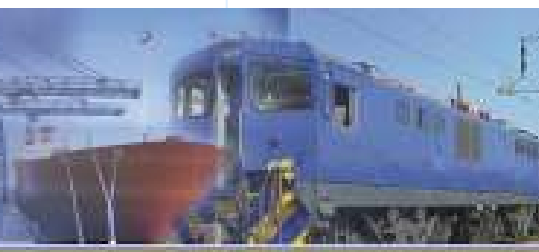
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## Summary of Cover

Contractors Public Liability Insurance

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## 2. Contractors Public Liability Insurance

### Insured Contracts

- All contracts up to a maximum value of R100,000,000 any one contract.
- Limited to a maximum contract period of 36 months followed by a maximum Defects Liability / Maintenance period of 12 months.

### Synopsis of Cover

Legal Liability to pay as compensation for and in consequence of:

- Accidental death of or injury to or illness or disease contracted by any person.
- Accidental loss of / or physical damage to tangible property.

Occurring during the period of insurance and arising out of or in connection with the performance of the Insured Contract(s).

- First Party Property Extension will apply to the Lateral Support policy extensions.

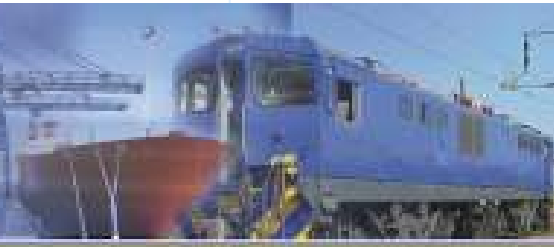
### Type Of Contract

All Contracts undertaken including:-

- Chemical Vegetation Control
- Vegetation Rehabilitation
- Ballast Tamping
- Rail Track Re-profiling including the contract works

### N.B.

The above noted contract types attract specific differentiated rates and are insured by way of a separate policy.



### Limits Of Indemnity

|                               |   |
|-------------------------------|---|
| Contractors Public Liability  | R10,000,000 any one occurrence / unlimited for the Period of Insurance      |
| Removal of Lateral Support    | R5,000,000 unlimited for the Period of Insurance (provided on request only) |
| Statutory Legal Defence Costs | R500,000 any one occurrence   |
| Arrest / Assault / Defamation | R500,000 any one occurrence   |
| Emergency Medical Expenses    | R500,000 any one occurrence   |
| Prevention of Access          | R500,000 any one occurrence   |
| Trespass / Nuisance           | R500,000 any one occurrence   |
| Claims Preparation Costs      | R500,000 any one occurrence   |

### Deductibles

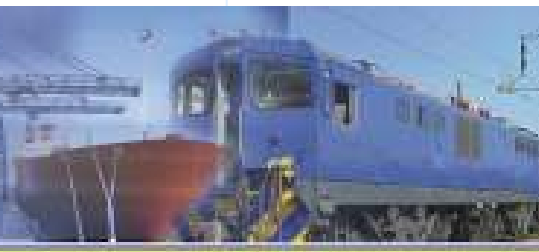
The deductible (excess) is the amount which the Contractor and/or Sub-Contractor is responsible for and this obligation must be reflected in the Tender and/or Contract Documents and the responsibility for same made clear.

The deductibles apply to each and every occurrence and in respect of all Contracts.

The deductibles are:

- Loss of or damage to public utilities R25,000
- Spread of fire R25,000
- Spread of fire – track re-profiling 10% of each loss subject to a minimum of R50,000 and a maximum of R250,000
- Loss of or damage to any other property R25,000
- Loss of or damage arising from removal of lateral support R25,000

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## Main Exceptions

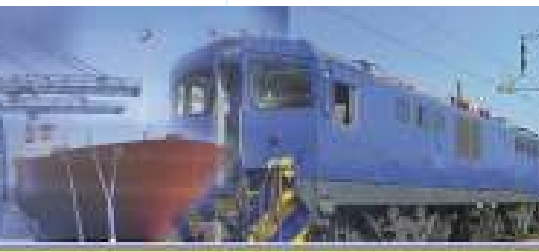
- The amount of the policy deductible.
- Death or injury to own employees.
- Motor vehicle liabilities under legislation or as defined in Multi-lateral Motor Vehicles Accident Fund No. 93 of 1989 as amended.
- Claims in connection with ownership or use of aircraft or watercraft.
- Property belonging to the Insured or in his care custody and control (as defined in the Policy).
- Property forming part of Contract Works.
- Liquidated damages or penalties for delays or in respect of performance or efficiency guarantees.
- Liability arising out of defects in workmanship materials design plan or specification in any part of the Property insured.
- Arising from or in connection with design plan or specification.
- Gradual pollution and contamination.
- After completion and handover (inclusive of the contractual Defects / Maintenance period).
- Punitive damages.
- Ownership hiring or leasing of any airport or airstrip.
- War, asbestos and nuclear risks.

## Cover Limitations / Warranties

### Rail Track Re-Profiling

- The maximum speed of any grinding unit shall not exceed 11.00km per hour.
- All Guards, Curtains, Spark Deflectors are to be in place and correctly positioned prior to the commencement of each grind.
- Maximum grinding distance in any one execution shall not exceed 10,000 metres.
- Any changes in prevailing weather conditions must be recorded and appropriate remedial action taken.
- The Insured Parties are to comply with all Fire Fighting requirements as set out in the Project Specification For Track Maintenance With An On Track Grinding / Profiling Machine and any amendments / deviations to this Project Specification are to be advised to the Insurer prior to work being undertaken.

**NB** If above not conformed with cover is forfeited.



- It is essential that this requirement is brought to the attention of Contractor's. Where this restriction is not practical, specific arrangements for cover can be made with underwriters. They will, however, require detailed underwriting information and an additional premium may be charged.

### Other Limitations

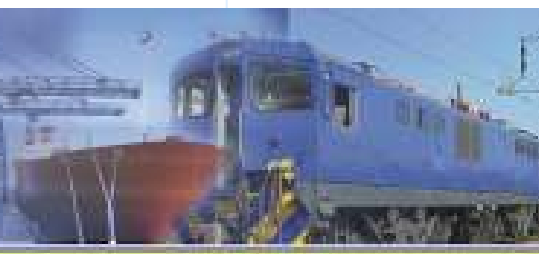
- Indemnity for removal of lateral support is limited to R5,000,000.

If a higher limit of indemnity is required, the Employers Insurance Broker's personnel needs to be advised and underwriting information will need to be provided in advance (i.e prior to Tender stage) and this will entail an additional premium.

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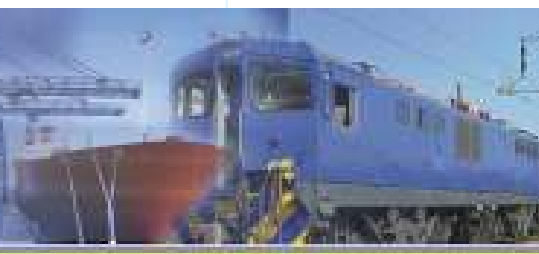


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## Administrative Procedures

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## Administrative Procedures

### Arranging Insurance cover

#### The Business Unit must

#### Prior to the commencement of each Contract:-

- Complete the Declaration Form per Part A as per Annexure 1 herein.
- Date and sign the Declaration Form.
- Submit the Declaration Form to the Broker.
- Record the Declaration on the Contract Monthly Register and submit this Register at the end of each month to Transnet Group Insurance and the Broker.

On receipt of the Declaration Form the Broker will submit it to the Insurer and the following documents will be issued and provided to the Business Unit:-

- An Insurance Certificate and a SASRIA Coupon evidencing cover.
- A Debit Note in respect of the premiums due (based on agreed rates).

#### Prior to the expiry of each Declarations estimated completion date:-

- Confirm to the Broker that the contract will be completed on time.
- On completion submit to the Broker a Declaration of the final contract value per Part B as per Annexure 1 herein.

**NB** If the original completion date is not going to be achieved, the period of insurance on the Declaration document will need to be extended and the Broker needs to be notified prior to original completion date.

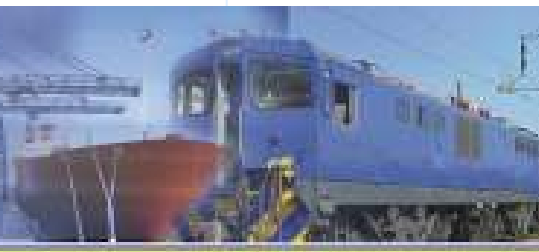
The Business Unit (prior to the expiry date of the certificate period) has to advise the Broker in writing to extend the period of insurance and provide the new estimated completion date.

This process needs to be followed by the Business Unit until the time of completion is achieved.

#### Once the Contract has been completed:-

- The Business Unit has to declare the final contract value to the Broker per Part B as per Annexure 1 herein.
- The deposit premium will then be adjusted accordingly.

**Failure by the Business Unit to conform to the above procedure will result in cover being voided.**



## Contracts that require specific arrangements

All contracts that fall outside the scope of this Principal Controlled Insurance Programme have to be advised to the Broker prior to Tender and specific "One Off" cover will need to be negotiated. These will be:

- Where the Contract Value exceeds R100,000,000.
- Where the Contracted period exceeds 36 months.
- Where the Contracted Defects Liability Maintenance period exceeds 12 months.
- Other excluded Contracts as described on Page 5 herein.
- Contracts involving harbors, dams, tunneling, mining, quarrying, shaft sinking, underground work, alterations to water courses being river diversions or coffer dams.
- Contracts outside of the Territorial Limits.

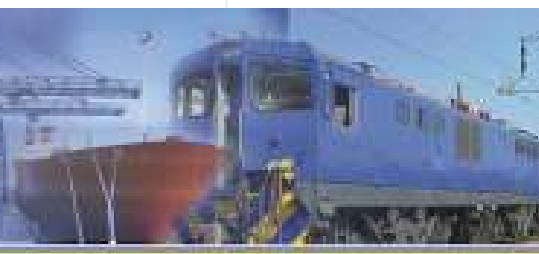
**In this regard contact the Employers Insurance Broker's personnel as detailed on Page 19 herein.**

Contracts where cover limitations will be exceeded or where cover warranties cannot be complied with need to be discussed with the Employers Insurance Broker's personnel prior to contract award date to enable the Broker to make specific arrangements with Underwriters. This will however require detailed Underwriting Information and an additional premium may be charged.

- In order to ensure that Contractor's and site staff are aware of procedures a copy of this Procedure Manual must be supplied to the contract administrators and each Contractor on award of contract.

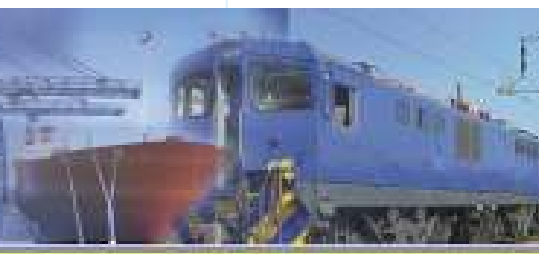


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**Important Considerations**

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## Important Considerations

Cognizance must be taken of the following important considerations:-

- For contracts involving assembly or erection of plant and machinery or repairs maintenance or overhaul thereto, **THE FULL NEW REPLACEMENT VALUE OF THE PLANT/MACHINERY** involved must be declared **AND NOT ONLY THE CONTRACT VALUE**, for example.:
  - Cranes (*repairs or final assembly*)
  - Machinery being moved
  - Maintenance work above the high water mark on Portnet Vessels whilst in dry dock.
- Specific arrangements are in place to cover certain contracts where the exposure to own damage (*damage to the works*) is nil or negligible, but where a high third party liability exposure exists. For example:
  - Chemical control of vegetation
  - Vegetation rehabilitation
  - Ballast tamping
  - Re-profiling of Track

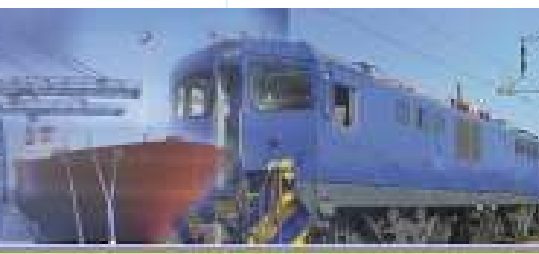
Contracts of this nature must be clearly identified on the Declaration Form.

- Contract value must include the replacement value of any Free Issue Material provided.
- VAT must be added to all contract value declarations in order to comply with local legislation.
- All policy limits and deductibles are Vat inclusive.

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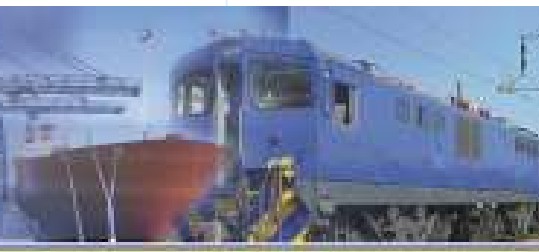


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## Claims Procedure

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## Claims Procedure

In the event of any incident or occurrence, which is likely, to give rise to a claim under the Insurance arranged by the Principal the following procedures shall be adhered to in addition to any statutory or other requirements contained in the Contract.

**IMMEDIATELY** advise **Aon Construction & Engineering Risks (Attention Robert Troup)**.

At the same time complete the **Incident Advice Form (Annexure 2 herein)** and submit to **Aon Construction & Engineering Risks**.

- Losses involving **theft or malicious damage** must be reported to the police and a police reference number obtained and recorded.
- The Employer, Contactor(s) or Sub-Contractor(s) shall allow free access to Insurers' Loss Adjuster(s) and / or Employer's Insurance Broker for the purpose of investigation and assessing the loss or damage.
- The Employer, Contractor(s) shall **not** deal direct with the Insurers other than by co-operating with their Loss Adjuster(s) and / or the Employers Insurance Broker.
- No **Admission of Liability** shall be made by the Employer, Contractor(s) or Sub-Contractor(s) in the event of damage, loss or injury to third party property or persons.
- Letters from claimants should be passed to **Aon Construction & Engineering Risks** as soon as possible via the Employer if necessary.
- In the event of immediate repairs being necessary in the interest of safety, the Contractors may with the Employer's permission proceed with such repairs.
- The Employer shall immediately advise Robert Troup at **Aon Construction & Engineering Risks**.
- Other than in the circumstances described above the Contractor shall not proceed with the making good of any loss without the prior authorization of the Employer who shall advise the Insurer's appointed Loss Adjuster(s) and Robert Troup of **Aon Construction & Engineering Risks**.
- Upon commencement of the making good of any loss, the Contractor shall keep separate records of the costs involved in making good such loss and these records must be authenticated by the Employer for submission to the Insurer's or their Loss Adjuster(s). Such records shall include, inter alia, the entire cost of labour, materials, transport and equipment.
- The basis upon which the Insurers will indemnify loss or damage is the cost of repair or replacement of the loss or damage including, inter alia, transport and overheads.
- On completion of the making good of any loss the records of the costs involved having been authenticated by the Employer shall be sent to the Insurer's via their Loss Adjuster(s) and copied to **Aon Construction & Engineering Risks (Mr Robert Troup)** for processing.



## Procedure Manual Principal Controlled Insurance 2007

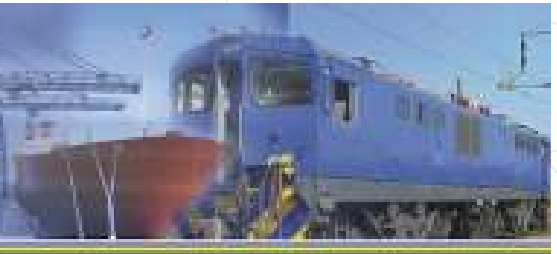
- Upon the amount of the loss or damage being agreed upon by the Insurer's Loss Adjuster(s) and the Contractor, an "Agreement of Loss" form will be signed by the Contractor and Employer.
- The amount agreed upon by the Insurers, the Contractor and the Employer shall be paid by the Insurers to the Employer net of the deductible, who will arrange for the payment to be made to the Contractor as appropriate after deduction of the first amount payable.

- All incidents which could give rise to a claim under the insurances arranged by the Principal / Employer must be notified to the Broker without delay, per the procedures set out above

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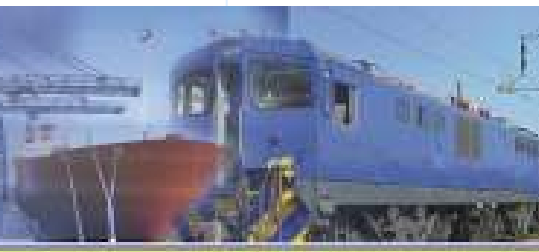


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**Aon South Africa Personnel  
Construction and Engineering Division**

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## Aon South Africa Personnel

### Construction and Engineering Division

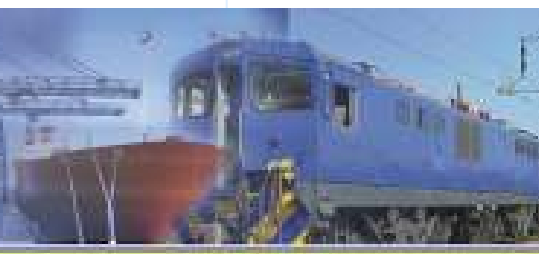
Aon South Africa personnel are at all times available for advice, please feel free to contact :-

- **Garth Sueltz**  
Divisional Director  
Tel No. (011)380-9171  
Fax No. (011)380-9211  
E-Mail [garth\\_sueltz@aon.co.za](mailto:garth_sueltz@aon.co.za)
  
- **Judy Bath**  
Account Administrator  
Tel No. (011)380-9053  
Fax No. (011)380-9211  
E-Mail [judy\\_bath@aon.co.za](mailto:judy_bath@aon.co.za)
  
- **Robert Troup**  
Claims Manager  
Tel No. (011)380-9036  
Fax No. (011)380-9222  
E-Mail [robert\\_troup@aon.co.za](mailto:robert_troup@aon.co.za)

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Principal Controlled Insurance 2007



## Annexure 1

**Transnet Principal Controlled Construction Insurance  
Programme Contract Award Declaration (Part A) And  
Contract Completion Declaration (Part B)**

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**TRANSNET PRINCIPAL CONTROLLED INSURANCE PROGRAMME  
CONTRACT DECLARATION**

**Send to**

Aon South Africa (Pty) Ltd  
Construction and Engineering  
PO Box 1874  
Parklands  
2121  
Attention : Judy Bath  
Tel No. (011) 380-9053  
Fax No. 086 505 9553  
E-Mail: judy\_bath@aon.co.za

From .....  
Represented by .....  
E-Mail Address .....  
Tel No. ....  
Fax No. ....

PRINCIPAL (PER CONTRACT DOCUMENT)  
CONTROLLING OFFICER  
TECHNICAL OFFICER ADDRESS  
PROJECT MANAGERS

**PART A – CONTRACT AWARD INFORMATION**

NAME OF CONTRACTOR  
CONTRACT AWARD DATE  
CONTRACT COMMENCEMENT DATE  
EXPECTED CONTRACT COMPLETION DATE  
DESCRIPTION OF CONTRACT  
MAINTENANCE PERIOD (MONTHS)  
CONTRACT VALUE AT AWARD (IF PLANT AND MACHINERY INCLUDE REPLACEMENT VALUE)  
ESTIMATED VALUE OF FREE ISSUED SUPPLIED TO CONTRACTOR

DOES THIS CONTRACT ENTAIL WORK IN RESPECT OF THE FOLLOWING CATEGORIES WHERE THE EXPOSURE TO OWN DAMAGE (DAMAGE TO WORKS) IS NIL OR NEGLIGIBLE

|       |                                |        |
|-------|--------------------------------|--------|
| [I]   | CHEMICAL CONTROL OF VEGETATION | YES/NO |
| [II]  | VEGETATION REHABILITATION      | YES/NO |
| [III] | BALLAST TAMPING                | YES/NO |
| [IV]  | TRACK RE-PROFILING             | YES/NO |

**OPTIONAL INSURANCE REQUIRED**

|       |  |        |
|-------|--|--------|
| [I]   | IS LATERAL SUPPORT COVER REQUIRED?   | YES/NO |
| [II]  | DOES THIS CONTRACT EVIDENCE AND EXPOSURE WHICH CAN BE COVERED BY PROJECT DELAY INSURANCE?  | YES/NO |
| [III] | WILL THE EMPLOYER/CONTRACTOR/SUB-CONTRACTOR MAKE ANY DIRECT IMPORTS OF REQUIREMENTS FOR THE CONTRACT THAT REQUIRE MARINE IMPORT INSURANCE? | YES/NO |

IF SO DETAILS NEED TO BE PROVIDED TO THE BROKER SO THAT THIS FORM OF COVER CAN BE ARRANGED

SIGNATURE ..... DATE: .....



**TRANSNET PRINCIPAL CONTROLLED INSURANCE PROGRAMME  
CONTRACT COMPLETION DECLARATION**

**ORIGINAL DECLARATION NO. ....**

---

---

**PART B – CONTRACT COMPLETION DECLARATION**

---

CONTRACT NUMBER

---

TITLE OF CONTRACT

---

CONTRACT COMPLETION DATE

---

ENDORSEMENT/CERTIFICATE NUMBER

---

EXPIRY OF MAINTENANCE PERIOD

---

FINAL CONTRACT VALUE

---

ACTUAL VALUE OF FREE ISSUE SUPPLIED TO CONTRACTOR

---

**PREVIEW COPY ONLY**

SIGNATURE:.....

DATE:.....



## Annexure 2

### Incident Advice Form

**PREVIEW COPY ONLY**

**TRANSNET PRINCIPAL CONTROLLED INSURANCE PROGRAMME**

**INCIDENT ADVICE FORM**

**Send to**

Aon South Africa (Pty) Ltd  
Construction and Engineering  
PO Box 1874  
Parklands  
2121  
Attention : Robert Troup  
Tel No. (011) 380-9036  
Fax No. (011) 380-9222  
E-Mail: robert\_troup@aon.co.za

From .....  
Represented by .....  
E-Mail Address .....  
Tel No. ....  
Fax No. ....

PRINCIPAL (*PER CONTRACT DOCUMENT*)

CONTRACT NUMBER

ORIGINAL DECLARATON NO.

TITLE OF CONTRACT

ORIGINAL CONTRACT COMMENCEMENT DATE

DATE OF LOSS OR DAMAGE

DATED REPORTED TO SITE AGENT

REPORTED BY

REPORTED TO BY

DATE

LOCALITY OF INCIDENT

DETAILS OF HOW THE LOSS OR DAMAGE OCCURRED

DETAILS AND NATURE OF LOSS OR DAMAGE TO CONTRACT WORKS / TO THIRD PARTY PROPERTY

DETAILS OF OTHER DEATH OR INJURY TO PARTIES

ESTIMATED COST (*SEPARATE RECORDS OF ALL COSTS MUST BE KEPT*)

WHO OR WHAT APPEARS TO BE RESPONSIBLE FOR THE CAUSE OF THE LOSS / DAMAGE

PERSON WHOM ASSESSOR SHOULD CONTACT

DESIGNATION:

TELEPHONE (*LANDLINE*)

CELLPHONE NO.

E-MAIL ADDRESS

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SIGNED BY: .....

SIGNATURE: .....

COMPANY: .....

DATE: .....

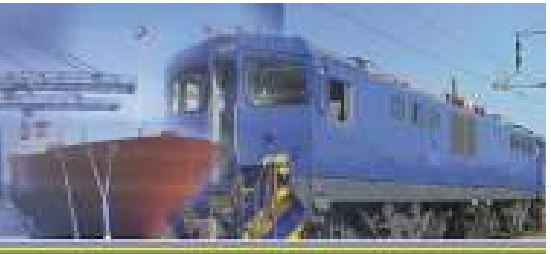




### Annexure 3

Annual Contract Works & Contractors Public Liability  
And Lateral Support Policy Wording

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## Annexure 4

### Annual Contractors Public Liability Policy Wording

In respect of Contracts entailing:-

- Chemical Vegetation Rehabilitation
- Vegetation Rehabilitation
- Ballast Tamping
- Rail Track Re-Profiling

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